

?f supply (w) chain (w) management  
Processing  
Processed 10 of 21 files ...  
Completed processing all files  
2209527 SUPPLY  
2006878 CHAIN  
2338766 MANAGEMENT  
S1 4072 SUPPLY (W) CHAIN (W) MANAGEMENT  
?f petroleum or lubricant?  
2040812 PETROLEUM  
504733 LUBRICANT?  
S2 2384335 PETROLEUM OR LUBRICANT?  
?f s1 and s2  
4072 S1  
2384335 S2  
S3 77 S1 AND S2  
?rd  
>>>Duplicate detection is not supported for File 340.  
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>>>Duplicate detection is not supported for File 652.  
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>>>Records from unsupported files will be retained in the RD set.  
...examined 50 records (50)  
...completed examining records  
S4 70 RD (unique items)  
?t 4/medium,k/all  
>>>KWIC option is not available in file(s): 58, 399  
>>>"MEDIUM" is not a valid format name in file(s): 652

Dialog 10 Feb 2004  
Searched OILPAT,  
PETROL,  
PETROL A, PETROL B

4/K/1 (Item 1 from file: 340)  
DIALOG(R)File 340:CLAIMS(R)/US Patent  
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10292625 2003-0037034  
**E/SYSTEM AND METHOD FOR LUBRICANTS SUPPLY CHAIN MANAGEMENT**  
Inventors: Daniels Tim (US); Hinzle Doug (US); Spatz David (US)  
Assignee: Unassigned Or Assigned To Individual  
Assignee Code: 68000

	Kind	Publication Number	Date	Application Number	Date
Priority Applic:.	A1	US 20030037034	20030220	US 2001932571	20010816
				US 2001932571	20010816

# SYSTEM AND METHOD FOR LUBRICANTS SUPPLY CHAIN MANAGEMENT

**Abstract:** The invention includes a method of **lubricants supply chain management** including: storing in a web-accessible database a catalog of **lubricants** and prices-per-unit for same which pricesper-unit optionally decrease based on certain pre...

...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in the web-browser client, and determining and...

...receiving an order from the web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; electronically transmitting over a network the order to...

...the order fulfillment agent electronically transmits over a network the order to at least one **lubricant** blender; electronically transmitting over a network the order and the delivery information to a freight...

Exemplary Claim: ...R A W I N G

1. A computer programmed to execute a process for **lubricants supply chain management**, said process comprising: (a) upon receiving a request from a web-browser client, querying a database comprising a catalog of **lubricants** and prices and availability for same and serving said results of said query to said...

...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in said web-browser client, and determining and ...

...receiving an order from said web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; (d) electronically transmitting over a network said order to a fulfillment agent selected from the group consisting of a **Lubricant Blender** or an Order Fulfillment Agent, and mixtures thereof; (e) electronically transmitting over a network...

Non-exemplary Claims: ...said Order Fulfillment Agent electronically transmits over a network said order to at least one **Lubricant Blender** ...

...for a specific type of service selected from the group of empty drum pick-up, **lubricant** analysis, used **lubricant** pick-up, and mixtures thereof, and electronically transmitting over a network said order to an...

...6. A computer readable medium having computer readable program means embodied thereon for **lubricants supply chain management**, said computer readable program means comprising: (a) computer readable program code means for receiving a request from a web-browser client, querying a database comprising a catalog of **lubricants** and prices and availability for same and serving said results of said query to said...

...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in said web-browser client, and determining and ...

...receiving an order from said web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; (d) computer readable program code means for electronically...

...a network said order to a fulfillment agent selected from the group consisting of a **Lubricants Blender** or an Order Fulfillment Agent, and mixtures thereof; (e) computer readable program code means...

...agent electronically transmits over a network said order and blending specifications to at least one **lubricant blender**...

...for a specific type of service selected from the group of empty drum pick-up, **lubricant** analysis, used **lubricant** pick-up, and mixtures thereof, and electronically transmitting over a network said order to an

11. A method for **lubricants supply chain management** comprising: (a) storing in a web-accessible database a catalog of **lubricants** and prices-per-unit and availability for same which prices-per-unit decrease based on...

...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in said web-browser client, and determining and ...

...receiving an order from said web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; (e) electronically transmitting over a network said order...

...agent electronically transmits over a network said order and blending specifications to at least one **lubricant blender**; (g) electronically transmitting over a network said order and said delivery information to

a...

...for a specific type of service selected from the group of empty drum pick-up, lubricant analysis, used lubricant pick-up, and mixtures thereof, and electronically transmitting over a network said order to an

4/K/2 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01569704

**SYSTEM AND METHOD FOR LUBRICANTS SUPPLY CHAIN MANAGEMENT**  
**SYSTEME ET PROCEDE POUR LA GESTION INTEGREE PRODUCTION-DISTRIBUTION DE**  
**LUBRIFIANTS AXEE SUR LA DEMANDE CLIENT**

PATENT ASSIGNEE:

Chevron U.S.A. Inc., (202573), 2613 Camino Ramon, 3rd Floor, San Ramon,  
CA 94583, (US), (Applicant designated States: all)

INVENTOR:

DANIELS, Tim, 1345 Talbot Avenue, Berkeley, CA 94102, (US)

HINZIE, Doug, 12 Pacific Drive, Novato, CA 94949, (US)

SPATZ, David, 118 Hacienda Drive, Tiburon, CA 94920, (US)

PATENT (CC, No, Kind, Date):

WO 2003017140 030227

APPLICATION (CC, No, Date): EP 2002748251 020726; WO 2002US23834 020726

PRIORITY (CC, No, Date): US 932571 010816

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
IE; IT; LI; LU; MC; NL; PT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

LANGUAGE (Publication,Procedural,Application): English; English; English

**SYSTEM AND METHOD FOR LUBRICANTS SUPPLY CHAIN MANAGEMENT**

4/K/3 (Item 2 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01566092

**Chip alignment and placement apparatus for integrated circuit, MEMS,**  
**photonic or other devices**

**Chip- Ausrichtungs- und Positionierungsvorrichtung fur eine integrierte**  
**Schaltung, MEMS, optische Bauteile oder andere Vorrichtungen**

**Appareil d'alignement et de placement de puces pour un circuit integre,**  
**MEMS, composant photonique ou autres dispositifs**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 1302974 A2 030416 (Basic)

APPLICATION (CC, No, Date): EP 2002022700 021010;

PRIORITY (CC, No, Date): US 328504 P 011011

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
IE; IT; LI; LU; MC; NL; PT; SE; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H01L-021/00

ABSTRACT WORD COUNT: 25

NOTE:

Figure number on first page: 7

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200316	903
SPEC A	(English)	200316	8159
Total word count - document A			9062
Total word count - document B			0
Total word count - documents A + B			9062

...SPECIFICATION breakage or damage caused by abrasion between the linear chip aggregations. In this regard, a **lubricant**, such as water or other suitable fluid **lubricant** is applied over the surfaces of the linear chip aggregations after cutting to reduce friction...to, manufacture of radio frequency identification (RFID) devices such as tags for inventory control or **supply chain management**.

4/K/4 (Item 1 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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01057897 \*\*Image available\*\*

**TASK DRIVEN TAXONOMY AND APPLICATIONS DELIVERY PLATFORM**

**PLATE-FORME DE CLASSIFICATIONS ET D'APPLICATIONS A BASE DE TACHES, SYSTEME ET PROCEDE CORRESPONDANTS**

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US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

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WERNICK Iddo, 3950 Blackstone Avenue, #1W, Riverdale, NY 10471, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

DEDITCH Aaron C (agent), Kenyon & Kenyon, One Broadway, New York, NY  
10004-1050, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200388092 A1 20031023 (WO 0388092)

Application: WO 2003US2277 20030124 (PCT/WO US0302277)

Priority Application: US 2002352064 20020409

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO

RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI  
SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-017/30

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9457

English Abstract

A system for receiving and transmitting data to a user includes a categorization engine (104) to receive data from a client data source (110) and at least one other data source (120, 130), and to categorize the data by assigning a document content identifier to the data to describe a nature of the data, a data record database (106) to receive and to store the categorized data, a structured database (102) to receive the data from the client data source (110) and to provide structured data, a data mapping arrangement (108) to map the categorized data by

associating the assigned document content identifier to at least one of a user class and a task supplied by the user, an application engine (112) to apply system elements to the mapped data based on at least one of the user class and the task, and to determine a format for providing the data to the user data and a delivery arrangement to transmit data to the user.

#### French Abstract

L'invention concerne un systeme pour la reception et la transmission de donnees vis-a-vis d'un utilisateur, qui comprend: un moteur de classification (104) recevant les donnees depuis une source de donnees client (110) et au moins une autre source de donnees (120, 130), et classifiant les donnees par attribution d'un identificateur de contenu de document aux donnees, de maniere a decrir la nature des donnees; une base de donnees (106) recevant et enregistrant les donnees classees; une base de donnees structurees (102) recevant les donnees de la source de donnees client (110) et fournissant des donnees structurees; un arrangement de correspondance de donnees (108) pour la mise en correspondance des donnees classees, par association entre l'identificateur susmentionne et au moins une classe d'utilisateur ou une tache fournie par l'utilisateur; un moteur d'applications (112) appliquant des elements du systeme aux donnees mises en correspondance sur la base de cette classe d'utilisateur ou de cette tache, et determinant un format pour la fourniture des donnees a l'utilisateur; et un arrangement de transmission pour la transmission des donnees a l'utilisateur.

Legal Status (Type, Date, Text)

Publication 20031023 A1 With international search report.

Examination 20040122 Request for preliminary examination prior to end of 19th month from priority date

#### Fulltext Availability:

Detailed Description

Claims

#### Detailed Description

... business objectives of commercial users such as Regulatory Compliance, Resource Optimization, Risk Management, Product Design, **Supply Chain Management**, Corporate Strategy and Communications. Other enterprises with other objectives may be similarly addressed as well

#### Claim

... a regulation, a resource optimization, a risk assessment, a product design for a product, a **supply chain management** objective, a corporate strategy, and a corporate communication.

6 The system of claim 1, wherein...

4/K/5 (Item 2 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00987090 \*\*Image available\*\*

**SYSTEM AND METHOD FOR LUBRICANTS SUPPLY CHAIN MANAGEMENT**

**SYSTEME ET PROCEDE POUR LA GESTION INTEGREE PRODUCTION-DISTRIBUTION DE LUBRIFIANTS AXEE SUR LA DEMANDE CLIENT**

Patent Applicant/Assignee:

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US (Residence), US (Nationality)

Inventor(s):

DANIELS Tim, 1345 Talbot Avenue, Berkeley, CA 94102, US,

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SPATZ David, 118 Hacienda Drive, Tiburon, CA 94920, US,

Legal Representative:

HADLOCK Timothy J (et al) (agent), Chevron Corporation, Law Department,  
P.O. Box 6006, San Ramon, CA 94583-0806, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200317140 A1 20030227 (WO 0317140)

Application: WO 2002US23834 20020726 (PCT/WO US0223834)

Priority Application: US 2001932571 20010816

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-017/30

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6929

#### English Abstract

The invention includes a method of **lubricants supply chain management** (105) including: storing in a web-accessible database (107, 110a-110c) a catalog of **lubricants** (110b) and prices-per-unit for same which prices-per-unit optionally decrease based on certain pre-determined, cumulative volume purchases; upon receiving at a web server a request from a web-browser client, querying the database and serving the results of the query to the requesting web-browser client for display (405); serving an order form to the web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type (13) preferences and delivery address entered in the web-browser client, and determining and displaying on the web-browser client a delivery price quote; receiving an order from the web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; electronically transmitting over a network (120) the order to an order fulfillment agent (125).

#### French Abstract

La presente invention concerne un procede de gestion integree production-distribution de lubrifiants axee sur la demande client (105) comportant: le stockage dans une base de donnees d'accès Web (107, 110a-110c) d'un catalogue de lubrifiants (110b) et des prix unitaires pour lesdits lubrifiants, lesquels prix unitaires eventuellement diminuent en fonction d'achats d'un volume cumulatif predetermine ; lors de la reception sur un serveur Web d'une requete en provenance d'un chercheur Web client, l'interrogation de la base de donnees et la presentation des resultats de l'interrogation formulee au serveur Web au chercheur Web client pour affichage (405); la presentation d'un bon de commande au chercheur Web client configure a comprendre des champs pour la quantite et le type de lubrifiants commandes, pour les preferences de type de livraison et l'adresse de livraison saisis par le terminal du chercheur Web client, et la determination et l'affichage sur le terminal du chercheur Web client d'un prix fixe pour la livraison; la reception d'une commande provenant du chercheur Web client pour un type et une quantite determinees de lubrifiants et comportant un type specifique de livraison selectionne; la transmission electronique sur un reseau (120) de la commande vers un agent de traitement de commandes (125).

Legal Status (Type, Date, Text)

Publication 20030227 A1 With international search report.

Examination 20030724 Request for preliminary examination prior to end of 19th month from priority date

#### SYSTEM AND METHOD FOR LUBRICANTS SUPPLY CHAIN MANAGEMENT

Fulltext Availability:

Detailed Description

Claims

#### English Abstract

The invention includes a method of **lubricants supply chain management** (105) including: storing in a web-accessible database (107, 110a-110c) a catalog of **lubricants** (110b) and prices-per-unit for same

which prices-per-unit optionally decrease based on...  
...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type (13) preferences and delivery address entered in the web-browser client, and determining...  
...receiving an order from the web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; electronically transmitting over a network (120) the order...

#### Detailed Description

##### SYSTEM AND METHOD FOR

##### **LUBRICANTS SUPPLY CHAIN MANAGEMENT**

##### 1. FIELD OF THE INVENTION

This invention relates to system and method system and method for an improved **lubricants** supply chain

##### II. BACKGROUND OF THE INVENTION

1 1 **Lubricant** products are traditionally sold through wholesale distributors, also known in the industry as "jobbers". The...

...3 end-user customer contacts, set or negotiate prices and make deliveries.

Jobbers sell the **lubricants** to end-users, retail outlets (e.g., Walmart), or 1 5 installers (e.g., Jiffy...intermediary in any customer service 1 7 that may occur. The result is that the **lubricant** producer and all but a few large 1 8 end users have little or no...

...selectively match customer needs with brands. This selection is not necessarily based on the best **lubricant** for the end-user's application. Instead, the selection may be based on available inventory the **lubricant** that best suits their particular needs. They may also pay a premium for the **lubricant** they buy to cover the mark-up cost and profit of the jobber's operation. There are also costs to the **lubricants** producer associated with maintaining a traditional jobber network. These costs include maintaining a sales staff, incentive programs, marketing, and pricing administration.

In order to eliminate these administrative costs for the **lubricants** producer, provide direct pricing from the **lubricants** producer to the end customer, and allow the **lubricants** producer to control the end customer relationship, a method that facilitates direct sales of **lubricants** to end customer would be advantageous.

4 Avoiding these shortcomings of the jobber network system in the past has been difficult. It was impractical for the **lubricants** producer to have a direct sales team sufficiently large to contact end customers directly. Also, the local delivery of **lubricants** orders of less than a full truckload was either unavailable or excessively expensive. Instead, the

3 **lubricants** producer to wholly or partially disintermediate the jobber, thus overcoming previous impediments which necessitated the...

...method.

7

##### 8 111. SUMMARY OF THE INVENTION

20 The invention includes a method of **lubricants supply chain management**

including: storing in a web-accessible database a catalog of **lubricants** and prices-per-unit for same which prices-per-unit decrease at certain predetermined quantity...browser client which contain fields or other selection means for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in the web-browser client, and determining and...

...receiving an order from the web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected;

electronically transmitting over a network the order to order fulfillment agent electronically transmits over a network the order to at least one lubricant blender; electronically transmitting over a network the order and the delivery information to a freight...Figs. 4A and 4B depict in one embodiment of the invention, schematic diagrams of the Lubricants Ordering step of the method and system of the invention.

Fig. 5 depicts in one...entity involved in the method, in one embodiment, is depicted.

The web server for Lubricants Supply Chain Manager 105 ("Lubes SCIVI") is 1 0 connected with Financial System 106, Lubricants Availability DB 1 1 0a, 1 1 Lubricants Catalog DB 1 1 0b ("Lubes DB"), Transactions Database 107, and 1 2 Lubricants Applications and Technical Information DB 1 1 0c. Lubes SCM 105, 1 3 Customer 1 1 5, Order Fulfillment Agent 125, Lubricant Blender 130, Freight Handling Agent 140, Trucking Company 145, Other Service Providers 150, 1 5...one network, other entities through a different network, and various permutations thereof. That is, the Lubricants SCM Server 105, as well as any general-purpose computers utilized by Customers 115 and... Lubes SCM 105 passes the order to Order Fulfillment Agent 125 and optionally simultaneously to Lubricants Blender 130. Order Fulfillment Agent 125 notifies Lubes SCM 105 of acceptance or rejection of ...the order. If accepted, Order Fulfillment Agent 125 passes order information to one or more Lubricants Blenders 130, if not previously done by SCM 105, and SCM 105 passes order to...

...or

more Trucking Companies 145 provide pick-up and delivery services from one or more Lubricants Blenders 130 to one or more Customers 1 1 5.

Lubricants Blender 130 manufactures the products required for the order and preparesthemforshipping. ExceptwhereCustomer115picksupthe Lubricants itself, Trucking Companies 145 pick up the products and deliver them to Customer 115. Trucking...operation on a conventional programmed digital computer, such as a client (Customer 115') and server (Lubricants SCM Server 105) (each shown in ...in (step 305) to Lubes SCM 105 web site and selects (step 31 0) the Lubricants Ordering System 315.

Thereafter, the Customer may select the Freight Quote System 320, and/or Service Ordering System 325. Thus, Customer 1 1 5 must first enter Lubricants Ordering System 15, before being permitted the option of then entering Freight Quote System or...information entered by the user. It will be appreciated that the Web server of the Lubricants Ordering System 315 captures the information entered by the user, including specialized input, as well...microwave, or satellite networks.

8 Fig. 4 depicts in one embodiment a schematic diagram of Lubricants Ordering step 315 of the process. The initial step is to Display Lubricants Catalog To 0 Customer (step 405). From this display, Customer 115 selects Lubricants 1 Products (step 410). This step optionally includes also selecting offered services, credit request, freight ... products in a delivery schedule optimization system overcomes in part the prior impracticality of the lubricants producer arranging delivery of partial truck loads of packaged lubricants .. A full truckload may be formed from a variety of partial truckloads of products from different industries, e.g., lubricants , automobile parts, and consumer commodities. Such delivery schedule optimization systems are available commercially (...437). Trucking Companies 145 loads the 1 1 products



specified in the order at the **Lubricants Blender's** 130 facility and deliver it to Customer I 1 5 (step 440). Trucking...occurs.  
In message box I I a registration and/or order form are passed from **Lubricants SCM** 105 to Customer 1 1 5. The Customer passes an online message for an order back to **Lubricants SCM** 105 (not shown), or in message box 1 B , passes a order via telephone to **Lubricants SCM** Customer Service 109. **Lubricants SCM** 105 obtains real-time freight quote from Freight Handling Agent 140 (message box 2). **Lubricants SCM** Customer Service 109 enter the order with **Lubricants SCM** 105 (message box 1.1B) - **Lubricants SCM** 105 passes an online or telephonic order confirmation to Customer 1 1 5 (message box 3).

5 **Lubricants SCM** 105 passes- order notification to Order Fulfillment Agent 125 and **Lubricants Blender** 130 (message boxes 4 and 4A). **Lubricants Blender** 130 obtains Formulas and Specifications as needed from Order Fulfillment Agent 125 (message box 413). **Lubricants Blender** 130 passes order acknowledgement to **Lubricants SCM** 105 (message box, 5). **Lubricants SCM** ...Customer 1 1 5 pick-up order directly, then pick up information is exchanged with **Lubricants Blender** 130 (message box 7A) and messages 8 and 9 are skipped.

Otherwise, Trucking Companies 145 schedules order pick-up with **Lubricants Blender** 130 (message box 8). Trucking Companies 145 schedules delivery with Customer 1 1 5 (message box 9). **Lubricants SCM** 105 passes the order shipped ...message box 12).

Freight Handling Agent 140 passes delivery notification with delivery fees information to **Lubricants SCM** 105 (message box 13). **Lubricants SCM** 105 passes pre-tax order data to Financial System 106 (message box 14).

Financial System 106 generates and passes invoice for the order to **Lubricants SCM** 105 (message box 15). **Lubricants SCM** 105 passes invoice to Customer 115 (message box 16).

Fig. 6 depicts in one...

#### Claim

##### VI. WHAT IS CLAIMED IS:

3 1 . A computer programmed to execute a process for **lubricants supply chain management** , said process comprising:  
(a) upon receiving a request from a web-browser client, querying a database comprising a catalog of **lubricants** and prices and availability for same and serving said results of said query to said...

...client which is

- 1 configured to contain fields for order quantity and type for
- 2 **lubricants** , delivery type preferences and delivery address entered
- 3 in said web-browser client, and ...an order from said web-browser client for a specific type
- 6 and quantity of **lubricants** and having a specific delivery type
- 7 selected;
- 8 (d) electronically transmitting over a network said order to a fulfillment
- 9 agent selected from the group consisting of a **Lubricant Blender** or an Order Fulfillment Agent, and mixtures thereof;
- (e) electronically transmitting over a network...said Order Fulfillment Agent electronically

transmits over a network said order to at least one **Lubricant Blender**.

3 The computer of claim 1, which further comprising serving a product search page...for a specific type of service selected from the group of empty drum pick-up, lubricant analysis, used lubricant pick0 up, and mixtures thereof, and electronically transmitting over a network 1 said order to...6 6. A computer readable medium having computer readable program

7 means embodied thereon for lubricants supply chain management , said

8 computer readable program means comprising:

9

(a) computer readable program code means for receiving a request from a web-browser client, querying a database comprising a catalog of lubricants and prices and availability for same and serving said results of said query to said for lubricants , delivery type preferences and delivery address entered in said web-browser client, and determining and...

...receiving an order

from said web-browser client for a specific type and quantity of lubricants and having a specific delivery type selected;

I (d) computer readable program code means for...

...a network said order to a fulfillment agent

selected from the group consisting of a Lubricants Blender or an Order Fulfillment Agent, and mixtures thereof;

(e) computer readable program code means...transmits over a network said order and blending specifications to at least one 1 5 lubricant blender. 17 8. The computer readable medium of claim ... for a specific type of service selected from the group of empty drum pick-up, lubricant analysis, used lubricant pick-up, and mixtures thereof, and electronically transmitting over ...on cumulative purchase volume over a pre-determined time period.

1 1. A method for lubricants supply chain management comprising: (a) storing in a web-accessible database a catalog of lubricants and prices-per-unit and availability for same which prices-per-unit decrease based on...is

1 0 configured to contain fields for order quantity and type for

I 1 lubricants , delivery type preferences and delivery address entered

1 2 in said web-browser client, and...

...order from said web-browser client for a specific type

1 5 and quantity of lubricants and having a specific delivery type

1 6 selected;

1 7 (e) electronically ...agent electronically transmits over a network said order and blending specifications to at least one lubricant blender;

(g) electronically transmitting over a network said order and said delivery information to a...for a specific type of service selected from the group

of empty drum pick-up, lubricant analysis, used lubricant pick-up, and

mixtures thereof, and electronically transmitting over a network said order to an...

4/K/6 (Item 3 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00888183

COMPUTER METHOD AND APPARATUS FOR PETROLEUM TRADING AND LOGISTICS  
PROCEDE ET APPAREIL INFORMATIQUES CONCUS POUR LE COMMERCE ET LA LOGISTIQUE  
DU PETROLE

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abstract; title not checked by the International  
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replace "Framington" by "Farmington", "HAKIMATTER"  
by "HAKIMATTAR", "Marlborough" by "Marlborough" and  
"Farnbourgoug" by "Farnborough"  
Republication 20020725 A2 With declaration under Article 17(2) (a); without  
abstract; title not checked by the International  
Searching Authority.

**COMPUTER METHOD AND APPARATUS FOR PETROLEUM TRADING AND LOGISTICS**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

COMPUTER METHOD AND APPARATUS FOR

**PETROLEUM TRADING AND LOGISTICS**

BACKGROUND OF THE INVENTION

Generally speaking, the petroleum industry involves three major  
players--(1) oil refineries, (2) crude oil and refined products traders

...

...party typically uses internal procedures and proprietary means to

conduct business/trading. Crude oil and **petroleum** product trading is not standardized, there are over 600 types of crude oil around the...

...budget/target (dollar and timewise).

Further there is a dynamic aspect of crude oil and **petroleum** product trading.

In transit amounts of crude oil (or intermediate feedstock/components) - may become available...

...in fulfilling (in full or part) original orders.

Further, there are various distribution points for **petroleum** products (e.g., gasoline) throughout the United States. Different distribution points carry different grades. of...

...the distribution points based on monthly to quarterly reports by the distribution points.

Accordingly, the **petroleum** industry supply chain is illustrated in Fig. 5 and discussed later.

#### IO SUMMARY OF THE INVENTION

Currently lacking are effective and accurate tools to help **petroleum** traders and logistics personnel to make better decisions, collaborate in real-time and negotiate deals...trade data in electronic form for a subject trade, the trade data including indications of **petroleum** commodity, quantity and proposed trade recipients. The trade data is electronically posted in different versions...

...Fig. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry.

Fig. 6a is a block diagram of an arbitrage analyzer configured according to an...

...relationship configured according to a preferred embodiment of the present invention.

Fig. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention ...complete a transaction) for a desired quantity and grade of crude oil, intermediate feedstock or **petroleum** product. To that end, the deal negotiation system main screen 41 and series of subscreens...

...an online trading process that allows end users to buy or sell crude oil and **petroleum** products online and to handle other necessary operations related to **petroleum** trading. As such, the deal negotiation application 37a allows end users to conduct trading in...

...U.S. Products" tab (subscreen view) 43c displays the end user's current U.S. **petroleum** products trade deals. The "International Products" tab (subscreen view) 43d displays the end user's current international **petroleum** product trade deals. The "Intermediates" tab (subscreen view) 43e displays the end user's current...

...trade, index trade, fixed and flat trade or buy and sell trade),

(iii) grade of **petroleum** being traded,

(iv) geographic location where the crude oil, intermediate feedstock or **petroleum** product is being loaded or delivered,

(v) delivery terms and time period/date range (e...grades feature 53 controls display of posted trades 45 based on user-selected grade of **petroleum** .

The deal negotiation system 37a also provides various operations on trades (deals) 45, individually or...displays buyer information or seller information as appropriate. The buyer information includes buyernaine, commodity description/**petroleum** grade, pricing basis including exchange

and month that the exchange price was published, the buyer...

...remain active/expiration date time. The seller's information includes seller's name, commodity description/ **petroleum** grade, pricing basis, the seller's offered amount that is equal to, above or below...Fig. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry. The **petroleum** supply chain 100 is composed of a trading & supply logistics component 102, a refining operations...

...use of a linear programming (LP) model of the refinery.

During all aspects of the **petroleum** supply chain 100, traders may buy or sell the crude, intermediate feedstock or finished product in order to maximize their profit. Paper crude traders 120 will trade a **petroleum** product in the **petroleum** supply chain 100 without any expectation of ever taking delivery of the commodity.

Wet...

...traders 124, on the other hand, trade with an expectation of accepting delivery of a **petroleum** product for processing or sale. Various aspects of a **petroleum** trade may require credit & underwriting 122 in order to consummate the trade. Additionally, inspectors are employed at various point in the **petroleum** supply chain 100 to inspect and report on the quality and/or quantity of crude oil, intermediate feedstocks and **petroleum** products.

Marketing and distribution 1-26 move **petroleum** products produced by refinery operations 104 to retail and wholesale consumers. When the movement of **petroleum** products by ship is involved ship charter brokers 128 are employed to charter appropriate vessels to move the **petroleum** product to terminals/distribution points close to consumers. Tanker trucks often complete the movement by moving the **petroleum** products to their final destination (e.g., retail gasoline stations) where product marketers 126 have initiated marketing and sales campaigns to sell the **petroleum** products.

#### Decision Support Tools

As mentioned above, the deal negotiation system 37a provides support tools...

...of decision support tools that help the end user to quickly evaluate crude oils and **petroleum** products for supply, blending and trading purposes. These tools include profit margin evaluation tools, component ...engine tools.

I 0 The decision support tools are a set of applications based on **supply chain**

**management** technology, including Aspen Process Industry Modeling System (PIN4S), the leading process industry planning software; Aspen...

...the following: different refinery specifications, monthly refinery requirements, the variety of crude oils available in **petroleum** markets in geographical zones WO 02/21401 PCT/USOI/28039 particular crude or crudes being...variety of refined products, including different grades of gasoline, jet fuel oil, diesel oil, or **lubricants**.

Each blend component has its own unique physical and chemical characteristics or I 0 properties...computer 27 manages and executes linear programs to provide analysis of a specific aspect of **petroleum** trading, refining or logistics.

Hosting the decision support tools 39 on a non-client computer...

...Internet-connected client computer 25 with effectively unlimited availability.

A conventional linear program for running **petroleum** trading, refining or logistics models is Aspen PIMS. The models requires various inputs that

are...

...screens that allow the user to enter input data in real-time about the specific **petroleum** trading, refining or logistics problem as described above for the CBAT, COBAT and COE tools.

30 Additionally, embodiments of the present invention can receive input data about the specific **petroleum** trading, refining or logistics problem as a programming object (e.g., trade object 67).

Conditioning...

...and units of measure conversions (e.g., API v. specific gravity).

Analysis of a particular **petroleum** trading, refining or logistics problem includes receiving the input data describing the problem to be...

...equation conditioning and real-time access provides a much improved user experience for analysis of **petroleum** trading, refining or logistics problems.

Further tools are available in the preferred embodiment of deal...in the present invention. The arbitrage elements can represent crude oil, intermediate feedstocks and/or **petroleum** products. Arbitrage relationships do not necessarily have to be defined on identical element types (e...).

...a trader to visualize differentiations among arbitrage relationship elements.

Embodiments of the present invention provide **petroleum** trading, refining and logistics aware search engines. These specialized search engines recognize attributes associated specifically with **petroleum** trading and logistics. The search engines contain search-library knowledge bases which define attributes for a specific domain (e.g., **petroleum** trading and logistics). These attributes provide enhanced navigation of **petroleum**-based or logistics-based Web sites or other data stores. The **petroleum** aware search engines can be configured to navigate a specific Web site (e.g., a...or may not be in a partnership relationship with the searcher.

@Fig. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention

...knowledge stored- in search library knowledge base 142.

Transport selection and optimization tools enable the **petroleum** trader to screen and select available fleets, vessels, barges and pipeline cycles for the transportation...

...for available vessels given a specified load/quantity, location and delivery dates of a subject **petroleum** commodity. The user can add specific filtering rules to refine the search to include company...

...decision support tools 39 (e.g., CBAT-G) to provide vessel scheduling support to a **petroleum** product trade ...trading (displayed in Trade Floor Components panel 292). The blend specification of the desired resultant **petroleum** product is selected using the Blend Specification panel 290.

Fig. 13b illustrates a graphical user interface for displaying resultant **petroleum** product blends resulting from a CBAT-G evaluation. Resultant Product Blends panel 300 displays the...

...the user can optimize his selection of vessel used to ship components of the resultant **petroleum** product blend, or the resultant **petroleum** product blend itself.

A collaborative workflow environment 200 (Fig. 8) configured according to

an embodiment...

...would reduce the cost and increase the accuracy of conductin crude oil, intermediate feedstock or **petroleum** product trades.

9

During the lifecycle of a trade, four types of interactions are typically ...products. For example, interinediate feed stocks are produced from crude oil and refined to produce **petroleum** products. Any final crude-based produce 1 5 maybe generally referred to as a **petroleum** product. The present invention considers a trade deal 45 to cover any crude-based product...

Claim

... a subject trade, providing trade data in electronic form, the trade data including indications of **petroleum** commodity, quantity and proposed trade recipients; and electronically posting the trade data in different versions...

...crude oil, international crude oil, U.S. product, international product and intermediate products as the **petroleum** commodity.

3 A method as claimed in Claim 1 wherein the step of providing trade...

...communicating, using standard network protocols, between the client computer and the-host computer;  
(d) downloading **petroleum** products pricing data from an online pricing information provider for use in analyzing the crude...

...is overridable.

13 The method of Claim 1 1 further comprising:  
accessing dynamic databases including **petroleum** product specifications as inputs to the linear program.

14 The method of Claim 1 I...

...real-time on a computer network to determine a profit margin relative to various produceable **petroleum** product yields and qualities, comprising the steps of receiving, in response to a client computer...

...as inputs to a linear program, the linear program modeling yield and quality values for **petroleum** products produceable from crude oil represented by the crude oil trade deal;  
executing the linear...

...communicating, using standard network protocols, between the client computer and the host computer;  
(d) downloading **petroleum** products pricing data from an online pricing information provider for use in analyzing the crude...

...of the crude oil trade deal with respect to the yield and quality values for **petroleum** products produceable based on the analysis of the crude oil trade deal. -25 16. The...

...inputs is overridable.

17 The method of Claim 15 farther comprising:  
accessing dynamic databases including **petroleum** product specifications as inputs to the linear program.

18 The method of Claim 15 wherein...

...trade deal in real-time on a computer network to determine compliance to a desired **petroleum**

product specification, required volume and acquisition strategy, comprising the steps of receiving, in response to...

...as the inputs to analyze the intermediate feedstock trade deal, the linear program modeling the **petroleum** product specification, required volume and acquisition strategy values for the intermediate feedstocks represented by the...

...communicating, using standard network protocols, between the client computer and the host computer;  
(d) downloading **petroleum** products pricing data from an online pricing information provider for use in analyzing the intermediate...

...an output for indicating the compliance of the intermediate feedstock trade deal to the desired **petroleum** product specification, required volume and acquisition strategy.

20 The method of Claim 19 wherein any...

...inputs is overridable.

21 The method of Claim 19 further comprising:  
accessing dynamic databases including **petroleum** product specifications as inputs to the linear program.

22 The method of Claim 19 wherein...

...communicating, using standard network protocols, between the client computer and the host computer;  
(d) downloading **petroleum** products pricing data from an online pricing information provider for use in determining whether the...

...inputs is overridable.

25 The method of Claim 23 further comprising:  
accessing dynamic databases including **petroleum** product specifications as inputs to the linear program.

26 The method of Claim 23 wherein...

...whether the composite of blendstocks meets a predefined specification and yield for a variety of **petroleum** products,  
comprising the steps of:  
receiving, in response to a client computer request, characteristics of  
...

...whether the composite of blendstocks meets the predefined specification and yield for the variety of **petroleum** products;  
executing the linear program on the host computer using the conditioned characteristics as the...

...communicating, using standard network protocols, between the client computer and the host computer;  
(d) downloading **petroleum** products pricing data from an online pricing information provider for use in determining whether  
15 the composite of blendstocks meets the predefined specification and yield for the variety of **petroleum** products; and  
(e) producing an output for indicating whether the composite of blendstocks meets the predefined specification and yield for the variety of **petroleum** products.

28 The method of Claim 27 wherein any of the inputs is overridable.

29 The method of Claim 27 further comprising:  
accessing dynamic databases including **petroleum** product



specifications as inputs to the linear program.

30 The method of Claim 27 wherein...

...of analyzing a composite of crude oils.

31 The method of Claim 27 wherein the **petroleum** products include specific grades of gasoline and the linear program calculates the marginal value of each of the specific grades of gasoline.

32 The method of Claim 27 wherein the **petroleum** products include specific grades of fuel oil and the linear program calculates the marginal value...

...of the specific grades of fuel oil.

33 The method of Claim I wherein the **petroleum** products include specific grades of distillate and the linear program calculates the marginal value of...

...the specific grades of distillate.

34 A method for analyzing crude oil, intermediate feedstock and **petroleum** product arbitrage relationships, comprising the steps of:  
defining an arbitrage relationship between a plurality of crude oils,  
1 5 intermediate feedstocks and **petroleum** products;  
gathering online information for the plurality of crude oils,  
intermediate feedstocks and **petroleum** products in the defined arbitrage relationship; and  
generating an arbitrage spread value.

35 The method...

...to draw a  
between two geographical regions and selecting specific crude oil,  
intermediate feedstock and **petroleum** products as members of the  
arbitrage relationship.

36 The method of Claim 34 wherein alarms...

4/K/7 (Item 4 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00888182

**COMPUTER SYSTEM FOR PROVIDING A COLLABORATIVE WORKFLOW ENVIRONMENT**  
**SYSTEME D'ORDINATEURS POUR LA CONSTITUTION D'UN ENVIRONNEMENT DE FLUX DE**  
**TRAVAUX EN COLLABORATION**

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Correction 20020815 Corrections of entry in Section 1:  
Correction 20030403 Corrected version of Pamphlet: pages 1/20-20/20, drawings, replaced by new pages 1/21-21/21; due to late transmittal by the receiving Office  
Republication 20030403 A2 With declaration under Article 17(2) (a); without abstract; title not checked by the International Searching Authority.

Fulltext Availability:

Detailed Description

Detailed Description

COMPUTER SYSTEM FOR PROVIDING A  
COLLABORATIVE WORKFLOW ENVIRONMENT  
BACKGROUND OF THE INVENTION

Generally speaking, the **petroleum** industry involves three major players--(1) oil refineries, (2) crude oil and refined products traders

...

...party typically uses internal procedures and proprietary means to conduct business/trading. Crude oil and **petroleum** product trading is not standardized, there are over 600 types of crude oil around the...

...budget/target (dollar and timewise).

Further there is a dynamic aspect of crude oil and **petroleum** product trading.

In transit amounts of crude oil (or intermediate feedstock/components) may become available...

...in fulfilling (in full or part) original orders.

Further, there are various distribution points for **petroleum** products (e.g., gasoline) throughout the United States. Different distribution points carry different grades of...

...the distribution points based on monthly to quarterly reports by the

distribution points.

Accordingly, the **petroleum** industry supply chain is illustrated in Fig. 5 and discussed later.

#### SUMMARY OF THE INVENTION

Currently lacking are automated means for effecting real-time crude oil and **petroleum** product trading, refining and logistics support. The present invention addresses this and other needs in... Fig. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry.

Fig. 6a is a block diagram of an arbitrage analyzer configured according to an...

...relationship configured according to a preferred embodiment of the present invention.

Fig. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention ...complete a transaction) for a desired quantity and grade of crude oil, intermediate feedstock or **petroleum** product. To that end, the deal negotiation system main screen 41 and series of subscreens...

...an online trading process that allows end users to buy or sell crude oil and **petroleum** prod-acts online and to handle other necessary operations related to **petroleum** trading. As such, the deal negotiation application 37a allows end users to conduct trading in...

...U.S. Products" tab (subscreen view) 43c displays the end user's current U.S. **petroleum** products trade deals. The "International Products" tab (subscreen view) 43d displays the end user's current international **petroleum** product trade deals. The "Interinediates" tab (subscreen view) 43e displays the end user's current...

...trade, fixed and flat trade or buy and  
I 0 sell trade),  
(iii) grade of **petroleum** being traded,  
(iv) geographic location where the crude oil, intermediate feedstock or **petroleum** product is being loaded or delivered,  
(v) delivery terms and time period/date range (e...

...grades feature 53 controls display of posted trades 45 based on user-selected grade of **petroleum** .

The deal negotiation system 37a also provides various operations on trades (deals) 45, individually or...infon-nation or seller information as appropriate. The buyer information includes buyer name, commodity description/ **petroleum** grade, pricing basis including exchange and month -that the exchange price was published, the buyer...

...remain active/expiration date time. The seller's information includes seller's name, commodity description/ **petroleum** grade, pricing basis, the seller's offered amount that is equal to, above or below... Fig. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry. The **petroleum** supply chain 1 00 is composed of a trading & supply logistics component 102, a refining...

...use of a liner programming (LP) model of the refinery.  
During all aspects of the **petroleum** supply chain I 00, traders may buy or sell the crude, interinediate feedstock or finished product in order to maximize their profit. Paper crude traders 120 will trade a **petroleum** product in the **petroleum** supply chain 1 00 without any expectation of ever taking delivery of the commodity.

Wet...

...traders 124, on the other hand, trade with an expectation of accepting delivery of a **petroleum** product for processing or sale. Various aspects of a **petroleum** trade may require cr6dit & underwriting 122 in order to

consummate the trade. Additionally, inspectors are employed at various point in the **petroleum** supply chain I 00 to inspect and report on the quality and/or quantity of crude oil, intermediate feedstocks and **petroleum** products.

Marketing and distribution 126 move **petroleum** products produced by refinery operations 104 to retail and wholesale consumers. When the movement of **petroleum** products by ship is involved ship charter brokers 128 are employed to charter appropriate vessels to move the **petroleum** product to terminals/distribution points close to consumers. Tanker trucks often complete the movement by moving I 0 the **petroleum** products to their final destination (e.g., retail gasoline stations) where product marketers 126 have initiated marketing and sales campaigns to sell the **petroleum** products.

Decision Support Tool's

As mentioned above, the deal negotiation system 37a provides support...

...of decision support tools that help the end user to quickly evaluate crude oils and **petroleum** products for supply, blending and trading purposes. These tools include profit margin evaluation tools, component ...

...automated search engine tools.

The decision support tools are a set of applications based on **supply chain**

**management** technology, including Aspen Process Industry Modeling System (PWS), the leading process industry planning software; Aspen...different refinery specifications, monthly refinery requirements, the I 0 variety of crude oils available in **petroleum** markets in geographical zones WO 02/21400 PCT/USOI/28037 above allows the trader to...

...variety of refined products, including different grades of gasoline, jet fuel oil, diesel oil, or **lubricants** .

Each blend component has its own unique physical and chemical characteristics or properties. These components...computer 27 manages and executes linear programs to provide analysis of a specific aspect of **petroleum** trading, refining or logistics.

Hosting the decision support tools 39 on a non-client computer...

...Internet-connected client computer 25 with effectively unlimited availability.

A conventional linear program for running **petroleum** trading, refining or logistics models is Aspen PIMS. The models requires various inputs that are...

...screens that allow the user to enter input data in real-time about the specific **petroleum** trading, refining or logistics problem as described above for the CBAT, COBAT and COE tools. Additionally, embodiments of the present invention can receive input data about the specific **petroleum** trading, refining or logistics problem as a programming object (e.g., trade object 67).

Conditioning...

...and units of measure conversions (e.g., API v. specific gravity).

Analysis of a particular **petroleum** trading, refining or logistics problem includes receiving the input data describing the problem to be...conditioning and real-time access provides a much improved user experience for analysis of **petroleum** trading, refining or logistics problems.

Further tools are available in the preferred embodiment of deal...

...in the present invention. The arbitrage elements can represent

crude oil, intermediate feedstocks and/or **petroleum** products. Arbitrage relationships do not necessarily have to be defined on identical element types (e...a trader to visualize differentiations among arbitrage relationship elements.

Embodiments of the present invention provide **petroleum** trading, refining and logistics aware search engines. These specialized search engines recognize attributes associated specifically with **petroleum** trading and logistics. The search engines contain search-library knowledge bases which define attributes for a specific domain (e.g., **petroleum** trading and logistics). These attributes provide enhanced navigation of **petroleum** -based or logistics-based Web sites or other data stores. The **petroleum** aware search engines can be configured to navigate a specific Web site (e.g., a...

...or may not be in a partnership relationship with the searcher.

Fig. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention ...

...knowledge stored in search library knowledge base 142.

Transport selection and optimization tools enable the **petroleum** trader to screen and select available fleets, vessels, barges and pipeline cycles for the transportation...

...for available vessels given a specified load/quantity, location and delivery dates of a subject **petroleum** commodity. The user can add specific filtering 'rules' to refine the search to include company... decision support tools 39 (e.g., CBAT-G) to provide vessel scheduling support to a **petroleum** product trade deal 45. Fig. 13a illustrates the CBAT-G tool being used to evaluate...

...trading (displayed in Trade Floor Components panel 292). The blend specification of the desired resultant **petroleum** product is selected using the Blend Specification panel 290.

Fig. 13b illustrates a graphical user interface for displaying resultant **petroleum** product blends resulting from a CBAT-G evaluation. Resultant Product Blends panel 300 displays the...

...the user can optimize his selection of vessel used to ship components of the resultant **petroleum** product blend, or the resultant **petroleum** product blend itself.

A collaborative workflow environment 200 (Fig. 8) configured according to an embodiment...products. For example, intermediate feed stocks are produced from crude oil and refined to produce **petroleum** products. Any final crude-based produce may be generally referred to as a **petroleum** product. The present invention considers a trade deal 45 to cover any crude-based product...

4/K/8 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00887151 \*\*Image available\*\*  
COMPUTER METHOD AND APPARATUS FOR VESSEL SELECTION AND OPTIMIZATION  
COMPUTER METHOD AND APPARATUS FOR VESSEL SELECTION AND OPTIMIZATION  
PROCEDE ET DISPOSITIF INFORMATIQUES POUR SELECTION DE NAVIRE ET  
OPTIMISATION DE DONNEES CORRESPONDANTES  
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Priority Application: US 2000230840 20000907

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Main International Patent Class: G06F-017/60

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Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 17300

English Abstract

Currently lacking are effective and accurate tools to help **petroleum** traders and logistics personnel to make better decisions, collaborate in real-time and negotiate deals in a private and secure environment. The present invention addresses this and other needs in the industry. In particular, the present invention provides a non-client computer resident method optimizes vessel scheduling by aggregating vessel information. At least some of the vessel information is automatically downloaded from an electronic source. The aggregated vessel information is stored in a vessel information database comprising vessel information database records. Information is obtained about a potential vessel contracting transaction. The vessel information database is searched in a real-time manner to match the potential vessel contracting transaction to at least one of the vessel information database records such that the vessel contracting transaction is optimized. At least one of the optimized vessel contracting transactions is then reported. Optimization factors used to produce the optimized vessel contracting transactions include lowest cost and fastest delivery.

French Abstract

Dans l'industrie petroliere, il n'existe toujours pas d'outils efficaces et precis permettant aux petroliers et au personnel logistique d'optimiser leurs choix, de collaborer en temps reel et de negocier des transactions dans un environnement prive et securise. La presente invention permet de combler ce manque et de satisfaire a d'autres necessites inherentes a ce secteur. Plus particulierement, cette invention concerne une application residente sur ordinateur non client concue pour optimiser un programme d'exploitation de navire par rassemblement d'informations de navire. Certaines au moins de ces informations de navire sont automatiquement telechargees a partir d'une source electronique. Les informations de navire rassemblees sont stockees dans une base de donnees d'informations de navire comprenant des enregistrements de base de donnees d'informations de navire. On obtient des informations relatives a une eventuelle transaction portant sur l'exploitation d'un navire avant d'effectuer une recherche en temps reel dans la base de donnees d'informations de navire de facon a etabli une correspondance entre cette transaction eventuelle et au moins un enregistrement de base de donnees d'informations de navire, d'ou l'optimisation de la transaction correspondante. Par la suite, on etablit un rapport concernant au moins une transaction portant sur l'exploitation

d'un navire. Les facteurs d'optimisation permettant d'optimiser les transactions comprennent notamment une livraison plus rapide et moins couteuse.

Legal Status (Type, Date, Text)

Publication 20020314 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20020502 Request for preliminary examination prior to end of 19th month from priority date  
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Fulltext Availability:  
Detailed Description

English Abstract

Currently lacking are effective and accurate tools to help **petroleum** traders and logistics personnel to make better decisions, collaborate in real-time and negotiate deals...

Detailed Description

... AND APPARATUS FOR

VESSEL SELECTION AND OPTI1  
4IZATION

BACKGROUND OF THE INVENTION

Generally speaking, the **petroleum** industry involves three major players--(1) oil refineries, (2) crude oil and refined products traders ...

...party typically uses internal procedures and proprietary means to conduct business/trading. Crude oil and **petroleum** product trading is not standardized, there are over 600 types of crude oil around the...

...budget/target (dollar and timewise).

Further there is a dynamic aspect of crude oil and **petroleum** product trading.

In transit amounts of crude oil (or intermediate feedstock/components) may become available...

...in fulfilling (in full or part) original orders.

Further, there are various distribution points for **petroleum** products (e.g., gasoline) throughout the United States. Different distribution points carry different grades of...

...the distribution points based on monthly to quarterly reports by the distribution points.

Accordingly, the **petroleum** industry supply chain is illustrated in Fig. 5 and discussed later.

SUMMARY OF THE INVENTION

Currently lacking are automated means for effecting real-time crude oil and **petroleum** product trading, refining and logistics support. The present invention addresses this and other needs in...Fig. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry.

Fig. 6a is a block diagram of an arbitrage analyzer configured according to an...

...relationship configured according to a preferred embodiment of the present invention.

Fig. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention ...complete a transaction) for a desired quantity and grade of crude oil, intermediate feedstock or **petroleum** product. To that end, the deal

negotiation system main screen 41 and series of subscreens...

...an online trading process that allows end users to buy or sell crude oil and **petroleum** products online and to handle other necessary operations related to **petroleum** trading. As such, the deal negotiation application 37a allows end users to conduct trading in...

...U.S. Products" tab (subscreen view) 43c displays the end user's current U.S. **petroleum** products trade deals. The "International Products" tab (subscreen view) 43d displays the end user's current international **petroleum** product trade deals. The "Intermediates" tab (subscreen view) 43e displays the end user's current...

...trade, index trade, fixed and flat trade or buy and sell trade),

(iii) grade of **petroleum** being traded,

(iv) geographic location where the crude oil, intermediate feedstock or **petroleum** product is being loaded or delivered,

(v) delivery terms and time period/date range (e...

...grades feature 53 controls display of posted trades 45 based on user-selected grade of **petroleum** .

The deal negotiation system 37a also provides various operations on trades (deals) 45, individually or...buyer information or seller information as appropriate. The buyer information includes buyer name, commodity description/ **petroleum** grade, pricing basis including exchange and month that the exchange price was published, the buyer...

...remain active/expiration date time. The seller's information includes seller's name, commodity description/ **petroleum** grade, pricing basis, the seller's offered amount that is equal to, above or below...Fig. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry. The **petroleum** supply chain 100 is composed of a trading & supply logistics component 102, a refining operations...

...a liner programming (LP) model of the refinery.

1 5 During all aspects of the **petroleum** supply chain 1 00, traders may buy or sell the crude, intermediate feedstock or finished product in order to maximize their profit. Paper crude traders 120 will trade a **petroleum** product in the **petroleum** supply chain 100 without any expectation of ever taking delivery of the commodity.

Wet crude traders 124, on the other hand, trade with an expectation of accepting delivery of a **petroleum** product for processing or sale. Various aspects of a **petroleum** trade may require credit & underwriting 122 in order to consummate the trade. Additionally, inspectors are employed at various point in the **petroleum** supply chain 100 to inspect and report on the quality and/or quantity of crude oil, intermediate feedstocks and **petroleum** products.

Marketing and distribution 126 move **petroleum** products produced by refinery operations 104 to retail and wholesale consumers. When the movement of **petroleum** products by ship is involved ship charter brokers 128 are employed to charter appropriate vessels to move the **petroleum** product to terminals/distribution points close to consumers. Tanker trucks often complete the movement by moving the **petroleum** products to their final destination (e.g., retail gasoline stations) where product marketers 126 have initiated marketing and sales campaigns to sell the **petroleum** products.

#### Decision Support Tools

As mentioned above, the deal negotiation system 37a provides support... The process of trade deal evaluation is supported by a set of decision support tools that help the end user to quickly evaluate crude oils and **petroleum** products for supply, blending and trading purposes. These tools include profit margin evaluation tools, component...

...engine tools.



1 0 The decision support tools are a set of applications based on **supply chain management** technology, including Aspen Process Industry Modeling System (PIMS), the leading process industry planning software; Aspen...

...the following: different refinery specifications, monthly refinery requirements, the variety of crude oils available in **petroleum** markets in geographical zones WO 02/21318 PCT/USOI/28117 refinery. Using COBAT, traders may...variety of refined products, including different grades of gasoline, jet fuel oil, diesel oil, or **lubricants**. Each blend component has its own unique physical and chemical characteristics or properties. These components...computer 27 manages and executes linear programs to provide analysis of a specific aspect of **petroleum** trading, refining or logistics.

Hosting the decision support tools 39 on a non-client computer...

...Internet-connected. client computer 25 with effectively unlimited availability.

A conventional linear program for running **petroleum** trading, refining or logistics models is Aspen PM& The models requires various inputs that are ...

...screens that allow the user to enter input data in real-time about the specific **petroleum** trading, refining or logistics problem as described above for the CBAT, COBAT and COE tools.

Additionally, embodiments of the present invention can receive input data about the specific **petroleum** trading, refining or logistics problem as a programming object (e.g., trade object 67).  
Conditioning...

...and units of measure conversions (e.g., API v. specific gravity).

Analysis of a particular **petroleum** trading, refining or logistics problem includes receiving the input data describing the problem to be....

...equation conditioning and real-time access provides a much improved user experience for analysis of **petroleum** trading, refining or logistics problems. Further tools are available in the preferred embodiment of deal ...in the present invention. The arbitrage elements can represent crude oil, intermediate feedstocks and/or **petroleum** products. Arbitrage relationships do not necessarily have to be defined on identical element types (e...).

...a trader to visualize differentiations among arbitrage relationship elements.

Embodiments of the present invention provide **petroleum** trading, refining and logistics aware search engines. These specialized search engines recognize attributes associated specifically with **petroleum** trading and logistics. The search 1 5 engines contain search-library knowledge bases which define attributes for a specific domain (e.g., **petroleum** trading and logistics). These attributes provide enhanced navigation of **petroleum** -based or logistics-based Web sites or other data stores. The **petroleum** aware search engines can be configured to navigate a specific Web site (e.g., a...or may not be in a partnership relationship with the searcher.

Fig. 6c illustrates a **petroleum** trading, refining and logistics aware search 1 5 engine configured according an embodiment of the...

...knowledge stored in search library knowledge base 142.

Transport selection and optimization tools enable the **petroleum** trader

to screen and select available fleets, vessels, barges and pipeline cycles for the transportation...

...for available vessels given a specified load/quantity, location and delivery dates of a subject **petroleum** commodity. The user can add specific filtering 'rules' to refine the search to include company... decision support tools 39 (e.g., CBAT-G) to provide vessel scheduling support to a **petroleum** product trade deal 45. Fig. 13a illustrates the CBAT-G tool being used to evaluate...

...trading (displayed in Trade Floor Components panel 292). The blend specification of the desired resultant **petroleum** product is selected using the Blend Specification panel 290.

Fig. 13b illustrates a graphical user interface for displaying resultant **petroleum** product blends resulting from a CBAT-G evaluation. Resultant Product Blends panel 300 displays the...

...the user can optimize his selection of vessel used to ship components of the resultant **petroleum** product blend, or the resultant **petroleum** product blend itself. A collaborative workflow environment 200 (Fig. 8) configured according to an embodiment...products. For example, intermediate feed stocks are produced from crude oil and refined to produce **petroleum** products. Any final crude-based produce may be generally referred to as a **petroleum** product. The present invention considers a trade deal 45 to cover any crude-based product...

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00852897 \*\*Image available\*\*

**WIRELESS INTERACTIVE SYSTEM AND METHODOLOGY USING LOW-POWER-RF-TRANSCIEVER,  
SECURE PERVASIVE COMPUTING NETWORKS  
PROCEDE ET SYSTEME INTERACTIFS SANS FIL METTANT EN OEUVRE DES RESEAUX  
INFORMATIQUES PREPONDERANTS, SURS, A EMETTEUR/RECEPTEUR BASSE PUISSANCE  
DE FREQUENCES RADIOELECTRIQUES**

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Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

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Main International Patent Class: G06F-017/60

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8895

#### English Abstract

A pervasive computing network is disclosed including a group of first access controllers connected together on a first local area network, with each of the first access controllers including a radio frequency transceiver (60) constructed to transmit and receive radio frequency signals within a range less than about 100 meters and wherein at least two of the ranges of the first access controllers overlap one another and the first access controllers are constructed to communicate with a consumer touchpoint (66) device. The pervasive computing network further includes a group of second access controllers connected together on a second local area network. The pervasive computing device is further provided with both a first communication line connecting the first group of access controllers to a wide area network; a second communication line connecting the second group of access controllers to the wide area network; and a knowledge center connected to the wide area network in communication with the group of first access controllers and the group of second access controllers.

#### French Abstract

L'invention concerne un reseau informatique preponderant, caracterise en ce qu'il comprend un groupe de premiers modules de commande d'accès, connectés ensemble sur un premier reseau local, chacun de ces modules de commande d'accès comprenant un émetteur/recepteur de fréquences radioélectriques (60) conçu pour émettre et recevoir des signaux de fréquence radioélectrique, avec une portée inférieure à environ 100 metres, en ce qu'au moins deux des portées des premiers modules de commande d'accès se chevauchent l'une l'autre, et en ce que ces premiers modules sont conçus pour communiquer avec un dispositif client, du type "Touchpoint" (66); en outre, ce reseau informatique preponderant est caracterise en ce qu'il comprend un groupe de seconds modules de commande d'accès, connectés ensemble sur un second reseau local. En outre, le dispositif informatique preponderant est dote a la fois d'une premiere ligne de communication connectant le premier groupe de modules de commande d'accès a un reseau longue distance, et d'une seconde ligne de communication connectant le second groupe de modules de commande d'accès au reseau longue distance, un centre de connaissances étant connecté au reseau longue distance communiquant avec le groupe des premiers et le groupe des seconds modules de commande d'accès.

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#### Fulltext Availability:

Detailed Description

#### Detailed Description

... industry

(e.g., securities trading), medical (e.g., hospitals), transportation, food (e.g., vending machines), **petroleum** (e.g., gas pumps), retailing, gaming (e.g., casinos), entertainment (e.g., convention centers), manufacturing (e.g., **supply - chain management**), educational (e.g., universities), telecom and mobile suppliers, media entertainment, law enforcement, government (e.g...

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DIALOG(R) File 349:PCT FULLTEXT  
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00835710 \*\*Image available\*\*

CONTROL FOR AN INDUSTRIAL PROCESS USING ONE OR MORE MULTIDIMENSIONAL  
VARIABLES

COMMANDE D'UN PROCESSUS INDUSTRIEL AU MOYEN D'AU MOINS UNE VARIABLE  
MULTIDIMENSIONNELLE

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Patent and Priority Information (Country, Number, Date):

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DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 37644

#### English Abstract

A system for monitoring an industrial process and taking action based on the results of process monitoring. Actions taken may include process control, paging, voicemail, and input for e-enterprise systems. The system includes an input module for receiving a plurality of parameters from a process for manufacture of a substance or object. The system also includes a library module. The library module includes a plurality of computer aided processes. Any one of the computer aided processes is capable of using each of the plurality of parameters to compare at least two of the plurality of parameters against a training set of parameters. The training set of parameters is generally predetermined. The computer aided process is also capable of determining if the at least two of the plurality of parameters are within a predetermined range of the training set of parameters. Additionally, the system includes an output module for outputting a result based upon the training set and the plurality of parameters.

#### French Abstract

La presente invention concerne un systeme qui permet de surveiller un processus industriel et de prendre des mesures fondees sur les resultats de la surveillance du processus. Les mesures prises peuvent comprendre la commande du processus, la recherche de personnes, la messagerie vocale et

l'entree dans des systemes d'entreprises electroniques. Le systeme comprend un module d'entree prevu pour recevoir une pluralite de parametres provenant d'un processus de fabrication d'une substance ou d'un objet. Le systeme comprend egalement un module de bibliotheque qui integre une pluralite de processus assistes par ordinateur lesquels sont capables d'utiliser chacun des divers parametres pour comparer au moins deux des divers parametres a un ensemble d'apprentissage de parametres. L'ensemble d'apprentissage de parametres est en general predetermine. Le processus assiste par ordinateur est egalement capable de determiner si au moins deux des divers parametres se situent dans une fourchette predeterminee de l'ensemble d'apprentissage de parametres. Le systeme comprend egalement un module de sortie qui produit un resultat sur la base de l'ensemble d'apprentissage et des divers parametres.

Legal Status (Type, Date, Text)

Publication 20010920 A2 Without international search report and to be republished upon receipt of that report.  
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Search Rpt 20020613 Late publication of international search report  
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Republication 20020613 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Fulltext Availability:

Detailed Description  
Claims

Detailed Description

... an operator or user of the process through an electronic display. For example, refining a **petroleum** product such as oil or gas often uses temperature measurements of raw or in process...also include Enterprise Resource Planning (ERP) and other e-enterprise systems 186, as well as **Supply Chain Management** (SCM) systems. The legacy systems may flirther include equation-based models 188 for predicting process... sufficient information to calculate appropriate set point values for one or more temperatures in a **petroleum** cracking process, such as the temperature profile for the first in a series of reactors...such as a process control device, or to an external entity such as associated **supply chain management** system (SCM), or to both internal and external systems. For example, where the third descriptor...Automatically provide information about a system component that needs to be replaced to a SCM ( **Supply Chain Management** ) sub-system. An event-driven interface to Enterprise Resource Planning (ERP) systems that uses process...

Claim

... determining step.

2 The system of claim I wherein the substance is selected from a **petroleum** product, a chemical product, a food product, a health product, a cleaning product, a biological...

4/K/11 (Item 1 from file: 654)

DIALOG(R)File 654:US Pat.Full.

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0005314359 \*\*IMAGE Available

Derwent Accession: 2001-582521

**Control for an industrial process using one or more multidimensional variables**

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Provisional				US 60-188565	20000310
Provisional				US 60-188590	20000310
Provisional				US 60-188591	20000310

Fulltext Word Count: 36995

Summary of the Invention:

...an operator or user of the process through an electronic display.  
 For example, refining a **petroleum** product such as oil or gas often uses temperature measurements of raw or in process...

Description of the Invention:

...also include Enterprise Resource Planning (ERP) and other e-enterprise systems 186, as well as **Supply Chain Management** (SCM) systems. The legacy systems may further include equation-based models 188 for predicting process...sufficient information to calculate appropriate set point values for one or more temperatures in a **petroleum** cracking process, such as the temperature profile for the first in a series of reactors...such as a process control device, or to an external entity such as associated s **supply chain management** system (SCM), or to both internal and external systems. For example, where the third descriptor...Automatically provide information about a system component that needs to be replaced to a SCM ( **Supply Chain Management** ) sub-system...

Non-exemplary or Dependent Claim(s):

2. The system of claim 1 wherein the substance is selected from a **petroleum** product, a chemical product, a food product, a health product, a cleaning product, a biological...

4/K/12 (Item 2 from file: 654)  
 DIALOG(R)File 654:US Pat.Fulll.  
 (c) Format only 2004 The Dialog Corp. All rts. reserv.

0005257620 \*\*IMAGE Available  
 Derwent Accession: 2001-582521  
**Monitoring system for an industrial process using one or more multidimensional variables**

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Continuation	PENDING			US 2001802377	20010309
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Provisional				US 60-188591	20000310
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Fulltext Word Count: 36478

Summary of the Invention:

...an operator or user of the process through an electronic display.  
For example, refining a **petroleum** product such as oil or gas often uses temperature measurements of raw or in process...

Description of the Invention:

...also include Enterprise Resource Planning (ERP) and other e-enterprise systems 186, as well as **Supply Chain Management** (SCM) systems. The legacy systems may further include equation-based models 188 for predicting process...sufficient information to calculate appropriate set point values for one or more temperatures in a **petroleum** cracking process, such as the temperature profile for the first in a series of reactors...such as a process control device, or to an external entity such as associated **s supply chain management** system (SCM), or to both internal and external systems. For example, where the third descriptor...Automatically provide information about a system component that needs to be replaced to a SCM ( **Supply Chain Management** ) sub-system...

Non-exemplary or Dependent Claim(s):

2. The system of claim 1 wherein the substance is selected from a **petroleum** product, a chemical product, a food product, a health product, a cleaning product, a biological...

4/K/13 (Item 3 from file: 654)

DIALOG(R) File 654:US Pat.Full.

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0005231428 \*\*IMAGE Available

Derwent Accession: 2001-582521

**Temporary expanding integrated monitoring network**

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20030083756	A1	20030501	US 2002214631	20020807
Continuation	PENDING			US 2001802377	20010309
Provisional				US 60-188565	20000310
Provisional				US 60-188590	20000310
Provisional				US 60-188591	20000310

Fulltext Word Count: 37028

Summary of the Invention:

...an operator or user of the process through an electronic display.  
For example, refining a **petroleum** product such as oil or gas often uses temperature measurements of raw or in process...

Description of the Invention:

...also include Enterprise Resource Planning (ERP) and other e-enterprise systems 186, as well as **Supply Chain Management** (SCM) systems. The legacy systems may further include equation-based models 188 for predicting process...sufficient information to calculate appropriate set point values for one or more temperatures in a **petroleum** cracking

process, such as the temperature profile for the first in a series of reactors...such as a process control device, or to an external entity such as associated s **supply chain management** system (SCM), or to both internal and external systems. For example, where the third descriptor...Automatically provide information about a system component that needs to be replaced to a SCM ( **Supply Chain Management** ) sub-system...

Non-exemplary or Dependent Claim(s):

2. The system of claim 1 wherein the substance is selected from a **petroleum** product, a chemical product, a food product, a health product, a cleaning product, a biological...

4/K/14 (Item 4 from file: 654)

DIALOG(R)File 654:US Pat.Full.

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0005184711 \*\*IMAGE Available

Derwent Accession: 2003-418021

**System and method for lubricants supply chain management**

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20030037034	A1	20030220	US 2001932571	20010816

Fulltext Word Count: 8260

**System and method for lubricants supply chain management**

Abstract:

The invention includes a method of **lubricants supply chain management** including: storing in a web-accessible database a catalog of **lubricants** and prices-per-unit for same which prices-per-unit optionally decrease based on certain...

...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in the web-browser client, and determining and ...

...receiving an order from the web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; electronically transmitting over a network the order to...

...the order fulfillment agent electronically transmits over a network the order to at least one **lubricant** blender; electronically transmitting over a network the order and the delivery information to a freight...

Summary of the Invention:

...0001] This invention relates to system and method system and method for an improved **Lubricants** supply chain...

...0002] **Lubricant** products are traditionally sold through wholesale distributors, also known in the industry as "jobbers". The...

...or end-user customer contacts, set or negotiate prices and make deliveries. Jobbers sell the **lubricants** to end-users, retail outlets (e.g., Walmart), or installers (e.g., Jiffy Lube) (collectively that may occur. The result is that the **lubricant** producer and all but a few large end users have little or no contact...



...selectively match customer needs with brands. This selection is not necessarily based on the best **lubricant** for the end-user's application. Instead, the selection may be based on available inventory...

...jobber. Thus, this can mean that the end user may not have access to the **lubricant** that best suits their particular needs. They may also pay a premium for the **lubricant** they buy to cover the mark-up cost and profit of the jobber's operation. There are also costs to the **lubricants** producer associated with maintaining a traditional jobber network. These costs include maintaining a sales staff...

...0004] In order to eliminate these administrative costs for the **lubricants** producer, provide direct pricing from the **lubricants** producer to the end customer, and allow the **lubricants** producer to control the end customer relationship, a method that facilitates direct sales of **lubricants** to end customer would be advantageous...the jobber network system in the past has been difficult. It was impractical for the **lubricants** producer to have a direct sales team sufficiently large to contact end customers directly. Also, the local delivery of **lubricants** orders of less than a full truckload was either unavailable or excessively expensive. Instead, the...

...new information technology it is now possible to craft a system and method allowing the **lubricants** producer to wholly or partially disintermediate the jobber, thus overcoming previous impediments which necessitated the0007] The invention includes a method of **lubricants supply chain management** including: storing in a web-accessible database a catalog of **lubricants** and prices-per-unit for same which prices-per-unit decrease at certain pre-determined...

...browser client which contain fields or other selection means for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in the web-browser client, and determining and ...

...receiving an order from the web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; electronically transmitting over a network the order to...

...the order fulfillment agent electronically transmits over a network the order to at least one **lubricant** blender; electronically transmitting over a network the order and the delivery information to a freight...

#### Description of the Drawings:

...FIGS. 4A and 4B depict in one embodiment of the invention, schematic diagrams of the **Lubricants** Ordering step of the method and system of the invention...

#### Description of the Invention:

...Each entity involved in the method, in one embodiment, is depicted. The web server for **Lubricants** Supply Chain Manager 105 ("Lubes SCM") is connected with Financial System 106, **Lubricants** Availability DB 110a, **Lubricants** Catalog DB 110b ("Lubes DB"), Transactions Database 107, and **Lubricants** Applications and Technical Information DB 110c. Lubes SCM 105, Customer 115, Order Fulfillment Agent 125, **Lubricant** Blender 130, Freight Handling Agent 140, Trucking Company 145, Other Service Providers 150, and Credit...

...one network, other entities through a different network, and various permutations thereof. That is, the **Lubricants** SCM Server 105, as well as any general-purpose computers utilized by Customers 115 and...Lubes SCM 105 passes the order to Order Fulfillment Agent 125 and optionally simultaneously to **Lubricants** Blender 130. Order Fulfillment Agent 125 notifies Lubes SCM 105 of acceptance or rejection of the order. If accepted, Order Fulfillment Agent 125 passes order information to one or more **Lubricants** Blenders 130, if not previously done by SCM 105, and SCM 105 passes order to...

...or more Trucking Companies 145 provide pick-up and delivery services

from one or more **Lubricants** Blenders 130 to one or more Customers 115  
...

...0024] **Lubricants** Blender 130 manufactures the products required for the order and prepares them for shipping. Except where Customer 115 picks up the **Lubricants** itself, Trucking Companies 145 pick up the products and deliver them to Customer 115. Trucking...operation on a conventional programmed digital computer, such as a client (Customer 115) and server (**Lubricants** SCM Server 105) (each shown in FIG. 1). The program code ... logs in (step 305) to Lubes SCM 105 web site and selects (step 310) the **Lubricants** Ordering System 315. Thereafter, the Customer may select the Freight Quote System 320, and/or Service Ordering System 325. Thus, Customer 115 must first enter **Lubricants** Ordering System 15, before being permitted the option of then entering Freight Quote System or... information entered by the user. It will be appreciated that the Web server of the **Lubricants** Ordering System 315 captures the information entered by the user, including specialized input, as well...0031]FIG. 4 depicts in one embodiment a schematic diagram of **Lubricants** Ordering step 315 of the process. The initial step is to Display **Lubricants** Catalog To Customer (step 405). From this display, Customer 115 selects **Lubricants** Products (step 410). This step optionally includes also selecting offered services, credit request, freight type...products in a delivery schedule optimization system overcomes in part the prior impracticality of the **lubricants** producer arranging delivery of partial truck loads of packaged **lubricants**. A full truckload may be formed from a variety of partial truckloads of products from different industries, e.g., **lubricants**, automobile parts, and consumer commodities. Such delivery schedule optimization systems are available commercially (e.g... 145 (step 437). Trucking Companies 145 loads the products specified in the order at the **Lubricants** Blender's 130 facility and deliver it to Customer 115 (step 440). Trucking Companies 145...0042] In message box 1, a registration and/or order form are passed from **Lubricants** SCM 105 to Customer 115. The Customer passes an online message for an order back to **Lubricants** SCM 105 (not shown), or in message box 1 B, passes a order via telephone to **Lubricants** SCM Customer Service 109. **Lubricants** SCM 105 obtains real-time freight quote from Freight Handling Agent 140 (message box 2). **Lubricants** SCM Customer Service 109 enter the order with **Lubricants** SCM 105 (message box 1.1 B). **Lubricants** SCM 105 passes an online or telephonic order confirmation to Customer 115 (message box 3...

...0043] **Lubricants** SCM 105 passes order notification to Order Fulfillment Agent 125 and **Lubricants** Blender 130 (message boxes 4 and 4A). **Lubricants** Blender 130 obtains Formulas and Specifications as needed from Order Fulfillment Agent 125 (message box 4B). **Lubricants** Blender 130 passes order acknowledgement to **Lubricants** SCM 105 (message box 5). **Lubricants** SCM 105 passes order notification to Freight Handling Agent 140 (message box 6). SCM Customer...

...7). If Customer 115 pick-up order directly, then pick up information is exchanged with **Lubricants** Blender 130 (message box 7A) and messages 8 and 9 are skipped0044] Otherwise, Trucking Companies 145 schedules order pick-up with **Lubricants** Blender 130 (message box 8). Trucking Companies 145 schedules delivery with Customer 115 (message box 9). **Lubricants** SCM 105 passes the order shipped message to Customer 115 (message box 11). Trucking Companies...

...0045] Freight Handling Agent 140 passes delivery notification with delivery fees information to **Lubricants** SCM 105 (message box 13). **Lubricants** SCM 105 passes pre-tax order data to Financial System 106 (message box 14). Financial System 106 generates and passes invoice for the order to **Lubricants** SCM 105 (message box 15). **Lubricants** SCM 105 passes invoice to Customer 115 (message box 16...

Exemplary or Independent Claim(s):

1. A computer programmed to execute a process for **lubricants** supply chain management, said process comprising: (a) upon receiving a request from a web-browser client, querying a database comprising a catalog of **lubricants** and prices and availability for same and

serving said results of said query to said...

- ...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in said web-browser client, and determining and...
  - ...receiving an order from said web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; (d) electronically transmitting over a network said order to a fulfillment agent selected from the group consisting of a **Lubricant Blender** or an Order Fulfillment Agent, and mixtures thereof; (e) electronically transmitting over a network...
  - ...6. A computer readable medium having computer readable program means embodied thereon for **lubricants supply chain management**, said ...receiving a request from a web-browser client, querying a database comprising a catalog of **lubricants** and prices and availability for same and serving said results of said query to said ...
  - ...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in said web-browser client, and determining and...
  - ...receiving an order from said web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; (d) computer readable program code means for electronically ...
  - ...a network said order to a fulfillment agent selected from the group consisting of a **Lubricants Blender** or an Order Fulfillment Agent, and mixtures thereof; (e) computer readable program code means...
  - ...11. A method for **lubricants supply chain management** comprising:
    - (a) storing in a web-accessible database a catalog of **lubricants** and prices-per-unit and availability for same which prices-per-unit decrease based on...web-browser client which is configured to contain fields for order quantity and type for **lubricants**, delivery type preferences and delivery address entered in said web-browser client, and determining and...
  - ...receiving an order from said web-browser client for a specific type and quantity of **lubricants** and having a specific delivery type selected; (e) electronically transmitting over a network said order ...
  - ...agent electronically transmits over a network said order and blending specifications to at least one **lubricant blender**; (g) electronically transmitting over a network said order and said delivery information to a...
- Non-exemplary or Dependent Claim(s):
- ...said Order Fulfillment Agent electronically transmits over a network said order to at least one **Lubricant Blender**...
  - ...for a specific type of service selected from the group of empty drum pick-up, **lubricant analysis**, used **lubricant pick-up**, and mixtures thereof, and electronically transmitting over a network said order to an...agent electronically transmits over a network said order and blending specifications to at least one **lubricant blender**...
  - ...for a specific type of service selected from the group of empty drum pick-up, **lubricant analysis**, used **lubricant pick-up**, and mixtures thereof, and ...for a specific type of service selected from the group of empty drum pick-up, **lubricant analysis**, used **lubricant pick-up**, and mixtures thereof, and electronically transmitting over a network said order to an...

4/K/15 (Item 5 from file: 654)  
DIALOG(R)File 654:US Pat.Full.  
(c) Format only 2004 The Dialog Corp. All rts. reserv.

0005183926 \*\*IMAGE Available  
Derwent Accession: 2003-299885

**Chip alignment and placement apparatus for integrated circuit, MEMS,  
photonic or other devices**

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Richard Collins, INV  
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Richard Spedden, INV

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20030036249	A1	20030220	US 2002212857	20020806
Provisional				US 60-310280	20010806
Provisional				US 60-328504	20011011

Fulltext Word Count: 10632

Summary of the Invention:

...breakage or damage caused by abrasion between the linear chip aggregations. In this regard, a **lubricant**, such as water or other suitable fluid **lubricant** is applied over the surfaces of the linear chip aggregations after cutting to reduce friction...

Description of the Invention:

...to, manufacture of radio frequency identification (RFID) devices such as tags for inventory control or **supply chain management**

4/K/16 (Item 6 from file: 654)  
DIALOG(R)File 654:US Pat.Full.  
(c) Format only 2004 The Dialog Corp. All rts. reserv.

0005118407 \*\*IMAGE Available  
Derwent Accession: 2003-199439

**Method and system for facilitating the integration of a plurality of dissimilar systems**

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020169842	A1	20021114	US 2002109874	20020401
Provisional				US 60-280121	20010402

Fulltext Word Count: 12920

Summary of the Invention:

...Resource Planning (ERP), Material Requirements Planning or Manufacturing Resource Planning (MRP), Customer Relationship Management (CRM), **Supply Chain Management** and Supply Chain Execution (SCM/SCE) and Marketplace applications (see glossary at the end of...

Description of the Invention:

...0062] SCM- **Supply Chain Management**. The delivery of enhanced

customer and economic value through synchronized management of the flow of...FIG. 1. An integration framework domain roughly corresponds to an industry, such as food or **petroleum**.) Business logic to be executed by the Business Logic Processing Units 110 and 114 is...

4/K/17 (Item 7 from file: 654)

DIALOG(R)File 654:US Pat.Full.

(c) Format only 2004 The Dialog Corp. All rts. reserv.

0005114371 \*\*IMAGE Available

Derwent Accession: 2003-810637

**System and method for managing a regulated industry**

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Kamlesh Desai, INV

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020165806	A1	20021107	US 200252412	20020123
Provisional				US 60-263177	20010123

Fulltext Word Count: 3583

Summary of the Invention:

...also tied to inventory, it is integral that compliance be tied into the winery's **supply chain management**.

[...of the wine industry do not address the problems described above. Known systems: lack total **supply chain management** solutions; do not provide complete regulation and tax compliance management; licensing on a per seat...supply chain applications to assist in compliance. Therefore, while there are other backend office and **supply chain management** solution providers, they are not, for example, wine-industry specific, nor do they focus on...

Description of the Invention:

...or electronically file compliance reports and other regulatory documents. Other applicable industries include: food, pharmaceuticals, **petroleum**, chemical, etc. The process, which is modeled here, is an actual instance whereas the present...

4/K/18 (Item 8 from file: 654)

DIALOG(R)File 654:US Pat.Full.

(c) Format only 2004 The Dialog Corp. All rts. reserv.

0005081459 \*\*IMAGE Available

Derwent Accession: 2002-226686

**Pervasive computing network architecture**

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Nhut Ha, INV

Tudo Do, INV

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020136214	A1	20020926	US 2001930886	20010814
Provisional				US 60-225185	20000814
Provisional				US 60-226252	20000817

Fulltext Word Count: 14000

Description of the Invention:

...industry (e.g., securities trading), medical (e.g., hospitals), transportation, food (e.g., vending machines), **petroleum** (e.g., gas pumps), retailing, gaming (e.g., casinos), entertainment (e.g., convention centers), manufacturing (e.g., **supply - chain management**), educational (e.g., universities), telecom and mobile suppliers, media entertainment, law enforcement, government (e.g...

4/K/19 (Item 9 from file: 654)

DIALOG(R) File 654:US Pat.Full.

(c) Format only 2004 The Dialog Corp. All rts. reserv.

0005061629 \*\*IMAGE Available

Derwent Accession: 2002-674451

**Web-centric design and engineering technologies, integration methods and optimization of engineering-to-procurement business process supply chain**

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020116374	A1	20020822	US 200274427	20020211
Provisional				US 60-270318	20010220

Fulltext Word Count: 5301

Summary of the Invention:

...over 100 billion dollars are invested in the Upstream (Exploration-to-Production of Oil & Gas) **Petroleum** industry. The current processes and methodologies for organizing and coordinating these investments (capital spending) are...

...These methods do not have the ability to assess and quantify risk. For example, see **Petroleum** Well Construction: Economides, et. al. John Wiley & Sons, 1998...0009] In general, the **petroleum** industry does not employ probabilistic methods. Moreover, none use an integrated engineering approach to optimize0011] The Upstream **Petroleum** industry consists of complex interrelated processes. Due to the breadth of disciplines involved, and the...155; 6,343,275) comprises largely of efforts by traditional Enterprise Resource Planning (ERP) and **supply chain management** (SCM) software which have addressed some of the generic business processes such as accounting and procurement, but have not been able to fully address the upstream **petroleum** industry problems because of lack of domain knowledge and, in any case, address none of...

Description of the Invention:

...engineering to procurement business process supply chain. Typically during the life cycle of an Upstream **Petroleum** industry oil and gas field project activities progress from Exploration to Subsurface engineering 12...methods, systems, processes and principles apply to a broad range of industries such as downstream **petroleum**, chemicals, financial, and telecom/internet networking. In the downstream **petroleum** or the chemical industry for example, one can easily envision the application of these systems...Although the description above contains many specifications, and that they are illustrated using the Upstream **Petroleum** Industry examples, these should not be construed as limiting the scope of the invention but...

...system and methods can be applied to a broad range of industries such as downstream **petroleum**, chemicals, financial, and telecom/internet networking.

4/K/20 (Item 10 from file: 654)  
DIALOG(R) File 654:US Pat.Full.  
(c) Format only 2004 The Dialog Corp. All rts. reserv.

0005014540 \*\*IMAGE Available  
Derwent Accession: 2002-415809  
Computer method and apparatus for vessel selection and optimization

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020069210	A1	20020606	US 2001949163	20010907
Provisional				US 60-230840	20000907

Fulltext Word Count: 19446

Abstract:

Currently lacking are effective and accurate tools to help **petroleum** traders and logistics personnel to make better decisions, collaborate in real-time and negotiate deals...

Summary of the Invention:

...0004] Generally speaking, the **petroleum** industry involves three major players-(1) oil refineries, (2) crude oil and refined products traders...

...party typically uses internal procedures and proprietary means to conduct business/trading. Crude oil and **petroleum** product trading is not standardized, there are over 600 types of crude oil around the...

0010] Further there is a dynamic aspect of crude oil and **petroleum** product trading. In transit amounts of crude oil (or intermediate feedstock/components) may become available...

...0011] Further, there are various distribution points for **petroleum** products (e.g., gasoline) throughout the United States. Different distribution points carry different grades of points based on monthly to quarterly reports by the distribution points. Accordingly, the **petroleum** industry supply chain is illustrated in FIG. 5 and discussed later...

...0012] Currently lacking are automated means for effecting real-time crude oil and **petroleum** product trading, refining and logistics support. The present invention addresses this and other needs in...

Description of the Drawings:

...FIG. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry...

...0027] FIG. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention...

#### Description of the Invention:

...complete a transaction) for a desired quantity and grade of crude oil, intermediate feedstock or **petroleum** product. To ...an online trading process that allows end users to buy or sell crude oil and **petroleum** products online and to handle other necessary operations related to **petroleum** trading. As such, the deal negotiation application 37a allows end users to conduct trading in...

...U.S. Products" tab (subscreen view) 43c displays the end user's current U.S. **petroleum** products trade deals. The "International Products" tab (subscreen view) 43d displays the end user's current international **petroleum** product trade deals. The "Intermediates" tab (subscreen view) 43e displays the end user's current...0049] (iii) grade of **petroleum** being tradedintermediate feedstock or **petroleum** product is being loaded or delivered...grades feature 53 controls display of posted trades 45 based on user-selected grade of **petroleum** .

[...buyer information or seller information as appropriate. The buyer information includes buyer name, commodity description/ **petroleum** grade, pricing basis including exchange and month that the exchange price was published, the buyer...

...remain active/expiration date time. The seller's information includes seller's name, commodity description/ **petroleum** grade, pricing basis, the seller's offered amount that is equal to, above or below...FIG. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry. The **petroleum** supply chain 100 is composed of a trading & supply logistics component 102, a refining operations...0118] During all aspects of the **petroleum** supply chain 100, traders may buy or sell the crude, intermediate feedstock or finished product in order to maximize their profit. Paper crude traders 120 will trade a **petroleum** product in the **petroleum** supply chain 100 without any expectation of ever taking delivery of the commodity. Wet crude traders 124, on the other hand, trade with an expectation of accepting delivery of a **petroleum** product for processing or sale. Various aspects of a **petroleum** trade may require credit & underwriting 122 in order to consummate the trade. Additionally, inspectors are employed at various point in the **petroleum** supply chain 100 to inspect and report on the quality and/or quantity of crude oil, intermediate feedstocks and **petroleum** products...

...0119] Marketing and distribution 126 move **petroleum** products produced by refinery operations 104 to retail and wholesale consumers. When the movement of **petroleum** products by ship is involved ship charter brokers 128 are employed to charter appropriate vessels to move the **petroleum** product to terminals/distribution points close to consumers. Tanker trucks often complete the movement by moving the **petroleum** products to their final destination (e.g., retail gasoline stations) where product marketers 126 have initiated marketing and sales campaigns to sell the **petroleum** products...of decision support tools that help the end user to quickly evaluate crude oils and **petroleum** products for supply, blending and trading purposes. These tools include profit margin evaluation tools, component...

...0121] The decision support tools are a set of applications based on **supply chain management** technology, including Aspen Process Industry Modeling System (PIMS), the leading process industry planning software; Aspen...the following: different refinery specifications, monthly refinery requirements, the variety of crude oils available in **petroleum** markets in geographical zones worldwide, the spectrum of crude oils to produce an intermediate **petroleum** product that would meet the refinery specifications and fluctuating oil prices...variety of refined products, including different grades of gasoline, jet fuel oil, diesel oil, or **lubricants** . Each blend component has its own unique physical and chemical characteristics or properties. These components...computer 27 manages and executes linear programs to provide analysis of a specific aspect of **petroleum** trading, refining or logistics. Hosting the decision support tools 39 on a non-client computer0165] A conventional linear program for running **petroleum** trading, refining or logistics models is Aspen PIMS. The models requires various inputs that are...



...screens that allow the user to enter input data in real-time about the specific **petroleum** trading, refining or logistics problem as described above for the CBAT, COBAT and COE tools. Additionally, embodiments of the present invention can receive input data about the specific **petroleum** trading, refining or logistics problem as a programming object (e.g., trade object 67...

...0167] Analysis of a particular **petroleum** trading, refining or logistics problem includes receiving the input data describing the problem to be...equation conditioning and real-time access provides a much improved user experience for analysis of **petroleum** trading, refining or logistics problems. Further tools are available in the preferred embodiment of deal...in the present invention. The arbitrage elements can represent crude oil, intermediate feedstocks and/or **petroleum** products. Arbitrage relationships do not necessarily have to be defined on identical element types (e...0178] Embodiments of the present invention provide **petroleum** trading, refining and logistics aware search engines. These specialized search engines recognize attributes associated specifically with **petroleum** trading and logistics. The search engines contain search-library knowledge bases which define attributes for a specific domain (e.g., **petroleum** trading and logistics). These attributes provide enhanced navigation of **petroleum** -based or logistics-based Web sites or other data stores. The **petroleum** aware search engines can be configured to navigate a specific Web site (e.g., a...0182] FIG. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention...

...0183] Transport selection and optimization tools enable the **petroleum** trader to screen and select available fleets, vessels, barges and pipeline cycles for the transportation...for available vessels given a specified load/quantity, location and delivery dates of a subject **petroleum** commodity. The user can add specific filtering 'rules' to refine the search to include company...decision support tools 39 (e.g., CBAT-G) to provide vessel scheduling support to a **petroleum** product trade deal 45. FIG. 13a illustrates the CBAT-G tool being used to evaluate...

...trading (displayed in Trade Floor Components panel 292). The blend specification of the desired resultant **petroleum** product is selected using the Blend Specification panel 290...

...0189] FIG. 13b illustrates a graphical user interface for displaying resultant **petroleum** product blends resulting from a CBAT-G evaluation. Resultant Product Blends panel 300 displays the...the user can optimize his selection of vessel used to ship components of the resultant **petroleum** product blend, or the resultant **petroleum** product blend itself...would reduce the cost and increase the accuracy of conducting crude oil, intermediate feedstock or **petroleum** product trades...products. For example, intermediate feed stocks are produced from crude oil and refined to produce **petroleum** products. Any final crude-based produce may be generally referred to as a **petroleum** product. The present invention considers a trade deal 45 to cover any crude-based product...

4/K/21 (Item 11 from file: 654)

DIALOG(R) File 654:US Pat.Full.

(c) Format only 2004 The Dialog Corp. All rts. reserv.

0004998113 \*\*IMAGE Available

Derwent Accession: 2002-415865

Computer system for providing a collaborative workflow environment

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020052769	A1	20020502	US 2001949149	20010907
Provisional				US 60-230840	20000907

Fulltext Word Count: 20414

#### Abstract:

Currently lacking are effective and accurate tools to help **petroleum** traders and logistics personnel to make better decisions, collaborate in real-time and negotiate deals...

#### Summary of the Invention:

...This application is related to United States Patent Application titled: COMPUTER METHOD AND APPARATUS FOR **PETROLEUM** TRADING AND LOGISTICS by Girish Navani, James Harrison Stommel, Barry H. Cohn, Michael P. Evans...

...0003] Generally speaking, the **petroleum** industry involves three major players-(1) oil refineries, (2) crude oil and refined products traders trading. Crude oil and **petroleum** product trading is not standardized, there are over 600 types of crude oil around the...0009] Further there is a dynamic aspect of crude oil and **petroleum** product trading. In transit amounts of crude oil (or intermediate feedstock/components) may become available...0010] Further, there are various distribution points for **petroleum** products (e.g., gasoline) throughout the United States. Different distribution points carry different grades of...

...the distribution points based on monthly to quarterly reports by the distribution points. Accordingly, the **petroleum** industry supply chain is illustrated in FIG. 5 and discussed later...

...0011] Currently lacking are automated means for effecting real-time crude oil and **petroleum** product trading, refining and logistics support. The present invention

#### Description of the Drawings:

...FIG. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry...

...0024] FIG. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention...

#### Description of the Invention:

...complete a transaction) for a desired quantity and grade of crude oil, intermediate feedstock or **petroleum** product. To ...an online trading process that allows end users to buy or sell crude oil and **petroleum** products online and to handle other necessary operations related to **petroleum** trading. As such, the deal negotiation application 37a allows end users to conduct trading in...

...U.S. Products" tab (subscreen view) 43c displays the end user's current U.S. **petroleum** products trade deals. The "International Products" tab (subscreen view) 43d displays the end user's current international **petroleum** product trade deals. The "Intermediates" tab (subscreen view) 43e displays the end user's current...0046] (iii) grade of **petroleum**

being traded intermediate feedstock or **petroleum** product is being loaded or delivered...grades feature 53 controls display of posted trades 45 based on user-selected grade of **petroleum** .

[...buyer information or seller information as appropriate. The buyer information includes buyer name, commodity description/ **petroleum** grade, pricing basis including exchange and month that the exchange price was published, the buyer...

...remain active/expiration date time. The seller's information includes seller's name, commodity description/ **petroleum** grade, pricing basis, the seller's offered amount that is equal to, above or below...FIG. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry. The **petroleum** supply chain 100 is composed of a trading & supply logistics component 102, a refining operations...0115] During all aspects of the **petroleum** supply chain 100, traders may buy or sell the crude, intermediate feedstock or finished product in order to maximize their profit. Paper crude traders 120 will trade a **petroleum** product in the **petroleum** supply chain 100 without any expectation of ever taking delivery of the commodity. Wet crude traders 124, on the other hand, trade with an expectation of accepting delivery of a **petroleum** product for processing or sale. Various aspects of a **petroleum** trade may require credit & underwriting 122 in order to consummate the trade. Additionally, inspectors are employed at various point in the **petroleum** supply chain ...inspect and report on the quality and/or quantity of crude oil, intermediate feedstocks and **petroleum** products...

...0116] Marketing and distribution 126 move **petroleum** products produced by refinery operations 104 to retail and wholesale consumers. When the movement of **petroleum** products by ship is involved ship charter brokers 128 are employed to charter appropriate vessels to move the **petroleum** product to terminals/distribution points close to consumers. Tanker trucks often complete the movement by moving the **petroleum** products to their final destination (e.g., retail gasoline stations) where product marketers 126 have initiated marketing and sales campaigns to sell the **petroleum** products...of decision support tools that help the end user to quickly evaluate crude oils and **petroleum** products for supply, blending and trading purposes. These tools include profit margin evaluation tools, component...

...0119] The decision support tools are a set of applications based on **supply chain management** technology, including Aspen Process Industry Modeling System (PIMS), the leading process industry planning software; Aspen...the following: different refinery specifications, monthly refinery requirements, the variety of crude oils available in **petroleum** markets in geographical zones worldwide, the spectrum of crude oils to produce an intermediate **petroleum** product that would meet the refinery specifications and fluctuating oil prices...variety of refined products, including different grades of gasoline, jet fuel oil, diesel oil, or **lubricants** . Each blend component has its own unique physical and chemical characteristics or properties. These components...computer 27 manages and executes linear programs to provide analysis of a specific aspect of **petroleum** trading, refining or logistics. Hosting the decision support tools 39 on a non-client computer 0165] A conventional linear program for running **petroleum** trading, refining or logistics models is Aspen PIMS. The models requires various inputs that are...

...screens that allow the user to enter input data in real-time about the specific **petroleum** trading, refining or logistics problem as described above for the CBAT, COBAT and COE tools. Additionally, embodiments of the present invention can receive input data about the specific **petroleum** trading, refining or logistics problem as a programming object (e.g., trade object 67...

...0167] Analysis of a particular **petroleum** trading, refining or logistics problem includes receiving the input data describing the problem to be ...equation conditioning and real-time access provides a much improved user experience for analysis of **petroleum** trading, refining or logistics problems. Further tools are available in the preferred embodiment of deal...in the present invention. The arbitrage

elements can represent crude oil, intermediate feedstocks and/or **petroleum** products. Arbitrage relationships do not necessarily have to be defined on identical element types (e...0178] Embodiments of the present invention provide **petroleum** trading, refining and logistics aware search engines. These specialized search engines recognize attributes associated specifically with **petroleum** trading and logistics. The search engines contain search-library knowledge bases which define attributes for a specific domain (e.g., **petroleum** trading and logistics). These attributes provide enhanced navigation of **petroleum** -based or logistics-based Web sites or other data stores. The **petroleum** aware search engines can be configured to navigate a specific Web site (e.g., a...0182] FIG. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention...

...0183] Transport selection and optimization tools enable the **petroleum** trader to ...for available vessels given a specified load/quantity, location and delivery dates of a subject **petroleum** commodity. The user can add specific filtering 'rules' to refine the search to include company...decision support tools 39 (e.g., CBAT-G) to provide vessel scheduling support to a **petroleum** product trade deal 45. FIG. 13a illustrates the CBAT-G tool being used to evaluate...

...trading (displayed in Trade Floor Components panel 292). The blend specification of the desired resultant **petroleum** product is selected using the Blend Specification panel 290...  
...0189] FIG. 13b illustrates a graphical user interface for displaying resultant **petroleum** product blends resulting from a CBAT-G evaluation. Resultant Product Blends panel 300 displays the...the user can optimize his selection of vessel used to ship components of the resultant **petroleum** product blend, or the resultant **petroleum** product blend itself...would reduce the cost and increase the accuracy of conducting crude oil, intermediate feedstock or **petroleum** product trades... products. For example, intermediate feed stocks are produced from crude oil and refined to produce **petroleum** products. Any final crude-based produce may be generally referred to as a **petroleum** product. The present invention considers a trade deal 45 to cover any crude-based product...

4/K/22 (Item 12 from file: 654)

DIALOG(R) File 654:US Pat.Full.

(c) Format only 2004 The Dialog Corp. All rts. reserv.

0004995024 \*\*IMAGE Available

Derwent Accession: 2002-415866

**Computer method and apparatus for petroleum trading and logistics**

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020049667	A1	20020425	US 2001950291	20010907
Provisional				US 60-230840	20000907

Fulltext Word Count: 22749

# Computer method and apparatus for petroleum trading and logistics

## Abstract:

...deal negotiation system: a secure and private environment for bid/offer transaction for physical **petroleum** commodity trading, seamlessly integrated with collaborative workflow and decision support tools...

## Summary of the Invention:

...0003] Generally speaking, the **petroleum** industry involves three major players-(1) oil refineries, (2) crude oil and refined products traders...

...party typically uses internal procedures and proprietary means to conduct business/trading. Crude oil and **petroleum** product trading is not standardized, there are over 600 types of crude oil around the...  
0009] Further there is a dynamic aspect of crude oil and **petroleum** product trading. In transit amounts of crude oil (or intermediate feedstock/components) may become available...

...0010] Further, there are various distribution points for **petroleum** products (e.g., gasoline) throughout the United States. Different distribution points carry different grades of points based on monthly to quarterly reports by the distribution points. Accordingly, the **petroleum** industry supply chain is illustrated in FIG. 5 and discussed later...

...0011] Currently lacking are effective and accurate tools to help **petroleum** traders and logistics personnel to make better decisions, collaborate in real-time and negotiate deals...a deal negotiation system: a secure and private environment for bid/offer transaction for physical **petroleum** commodity trading, seamlessly integrated with collaborative workflow and decision support toolsthe trade data including indications of **petroleum** commodity, quantity and proposed trade recipients. The trade data is electronically posted in different versions...

## Description of the Drawings:

...FIG. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry0025]FIG. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention...

## Description of the Invention:

...complete a transaction) for a desired quantity and grade of crude oil, intermediate feedstock or **petroleum** product. To ...an online trading process that allows end users to buy or sell crude oil and **petroleum** products online and to handle other necessary operations related to **petroleum** trading. As such, the deal negotiation application 37a allows end users to conduct trading in...

...U.S. Products" tab (subscreen view) 43c displays the end user's current U.S. **petroleum** products trade deals. The "International Products" tab (subscreen view) 43d displays the end user's current international **petroleum** product trade deals. The "Intermediates" tab (subscreen view) 43e displays the end user's current...0047] (iii) grade of **petroleum** being tradedintermediate feedstock or **petroleum** product is being loaded or delivered...grades feature 53 controls display of posted trades 45 based on user-selected grade of **petroleum** .

[...buyer information or seller information as appropriate. The buyer

information includes buyer name, commodity description/ **petroleum** grade, pricing basis including exchange and month that the exchange price was published, the buyer...

...remain active/expiration date time. The seller's information includes seller's name, commodity description/ **petroleum** grade, pricing basis, the seller's offered amount that is equal to, above or below...FIG. 5 is a schematic view of the supply chain and related roles in the **petroleum** industry. The **petroleum** supply chain 100 is composed of a trading & supply logistics component 102, a refining operations...0115] During all aspects of the **petroleum** supply chain 100, traders may buy or sell the crude, intermediate feedstock or finished product in order to maximize their profit. Paper crude traders 120 will trade a **petroleum** product in the **petroleum** supply chain 100 without any expectation of ever taking delivery of the commodity. Wet crude traders 124, on the other hand, trade with an expectation of accepting delivery of a **petroleum** product for processing or sale. Various aspects of a **petroleum** trade may require credit & underwriting 122 in order to consummate the trade. Additionally, inspectors are employed at various point in the **petroleum** supply chain 100 to inspect and report on the quality and/or quantity of crude oil, intermediate feedstocks and **petroleum** products...

...0116] Marketing and distribution 126 move **petroleum** products produced by refinery operations 104 to retail and wholesale consumers. When the movement of **petroleum** products by ship is involved ship charter brokers 128 are employed to charter appropriate vessels to move the **petroleum** product to terminals/distribution points close to consumers. Tanker trucks often complete the movement by moving the **petroleum** products to their final destination (e.g., retail gasoline stations) where product marketers 126 have initiated marketing and sales campaigns to sell the **petroleum** products...of decision support tools that help the end user to quickly evaluate crude oils and **petroleum** products for supply, blending and trading purposes. These tools include profit margin evaluation tools, component...

...0118] The decision support tools are a set of applications based on **supply chain management** technology, including Aspen Process Industry Modeling System (PIMS), the leading process industry planning software; Aspen...the following: different refinery specifications, monthly refinery requirements, the variety of crude oils available in **petroleum** markets in geographical zones worldwide, the spectrum of crude oils to produce an intermediate **petroleum** product that would meet the refinery specifications and fluctuating oil prices...variety of refined products, including different grades of gasoline, jet fuel oil, diesel oil, or **lubricants**. Each blend component has its own unique physical and chemical characteristics or properties. These components...computer 27 manages and executes linear programs to provide analysis of a specific aspect of **petroleum** trading, refining or logistics. Hosting the decision support tools 39 on a non-client computer0162] A conventional linear program for running **petroleum** trading, refining or logistics models is Aspen PIMS. The models requires various inputs that are...

...screens that allow the user to enter input data in real-time about the specific **petroleum** trading, refining or logistics problem as described above for the CBAT, COBAT and COE tools. Additionally, embodiments of the present invention can receive input data about the specific **petroleum** trading, refining or logistics problem as a programming object (e.g., trade object 67...

...0164] Analysis of a particular **petroleum** trading, refining or logistics problem includes receiving the input data describing the problem to be...equation conditioning and real-time access provides a much improved user experience for analysis of **petroleum** trading, refining or logistics problems. Further tools are available in the preferred embodiment of deal...in the present invention. The arbitrage elements can represent crude oil, intermediate feedstocks and/or **petroleum** products. Arbitrage relationships do not necessarily have to be defined on identical element types (e...0175] Embodiments of the present invention provide **petroleum** trading, refining and logistics aware search engines. These specialized search engines recognize

attributes associated specifically with **petroleum** trading and logistics. The search engines contain search-library knowledge bases which define attributes for a specific domain (e.g., **petroleum** trading and logistics). These attributes provide enhanced navigation of **petroleum**-based or logistics-based Web sites or other data stores. The **petroleum** aware search engines can be configured to navigate a specific Web site (e.g., a...0179]FIG. 6c illustrates a **petroleum** trading, refining and logistics aware search engine configured according an embodiment of the present invention...

...0180] Transport selection and optimization tools enable the **petroleum** trader to screen and select available fleets, vessels, barges and pipeline cycles for the transportation...for available vessels given a specified load/quantity, location and delivery dates of a subject **petroleum** commodity. The user can add specific filtering 'rules' to refine the search to include company...decision support tools 39 (e.g., CBAT-G) to provide vessel scheduling support to a **petroleum** product trade deal 45. FIG. 13a illustrates the CBAT-G tool being used to evaluate...

...trading (displayed in Trade Floor Components panel 292). The blend specification of the desired resultant **petroleum** product is selected using the Blend Specification panel 290...

...0186]FIG. 13b illustrates a graphical user interface for displaying resultant **petroleum** product blends resulting from a CBAT-G evaluation. Resultant Product Blends panel 300 displays the...the user can optimize his selection of vessel used to ship components of the resultant **petroleum** product blend, or the resultant **petroleum** product blend itself...would reduce the cost and increase the accuracy of conducting crude oil, intermediate feedstock or **petroleum** product trades...0205] Trading in **petroleum**-based products involves crude oil itself as well as many derivative products. For example, intermediate feed stocks are produced from crude oil and refined to produce **petroleum** products. Any final crude-based produce may be generally referred to as a **petroleum** product. The present invention considers a trade deal 45 to cover any crude-based product...

#### Exemplary or Independent Claim(s):

- ...a subject trade, providing trade data in electronic form, the trade data including indications of **petroleum** commodity, quantity and proposed trade recipients; and electronically posting the trade data in different versions...
- ...communicating, using standard network protocols, between the client computer and the host computer; (d) downloading **petroleum** products pricing data from an online pricing information provider ... real-time on a computer network to determine a profit margin relative to various produceable **petroleum** product yields and qualities, comprising the steps of: receiving, in response to a client computer ...
- ...as inputs to a linear program, the linear program modeling yield and quality values for **petroleum** products produceable from crude oil represented by the crude oil trade deal; executing the linear...
- ...communicating, using standard network protocols, between the client computer and the host computer; (d) downloading **petroleum** products pricing data from an online pricing information provider for use in analyzing the crude...
- ...of the crude oil trade deal with respect to the yield and quality values for **petroleum** products produceable based on the ...trade deal in real-time on a computer network to determine compliance to a desired **petroleum** product specification, required volume and acquisition strategy, comprising the steps of: receiving, in response to...
- ...as the inputs to analyze the intermediate feedstock trade deal, the linear program modeling the **petroleum** product specification,

required volume and acquisition strategy values for the intermediate feedstocks represented by the...

- ...communicating, using standard network protocols, between the client computer and the host computer; (d) downloading **petroleum** products pricing data from an online pricing information provider for use in analyzing the intermediate...
- ...an output for indicating the compliance of the intermediate feedstock trade deal to the desired **petroleum** product specification, required volume and acquisition strategy...communicating, using standard network protocols, between the client computer and the host computer; (d) downloading **petroleum** products pricing data from an online pricing information provider for use in determining whether the **petroleum** products, comprising the steps of: receiving, in response to a client computer request, characteristics of...
- ...whether the composite of blendstocks meets the predefined specification and yield for the variety of **petroleum** products; executing the linear program on the host computer using the conditioned characteristics as the...
- ...communicating, using standard network protocols, between the client computer and the host computer; (d) downloading **petroleum** products pricing data from an online pricing information provider for use in determining whether the composite of blendstocks meets the predefined specification and yield for the variety of **petroleum** products; and (e) producing an output for indicating whether the composite of blendstocks meets the predefined specification and yield for the variety of **petroleum** products...
- ...34. A method for analyzing crude oil, intermediate feedstock and **petroleum** product arbitrage relationships, comprising the steps of: defining an arbitrage relationship between a plurality of crude oils, intermediate feedstocks and **petroleum** products; gathering online information for the plurality of crude oils, intermediate feedstocks and **petroleum** products in the defined arbitrage relationship; and generating an arbitrage spread value

Non-exemplary or Dependent Claim(s):

- ...crude oil, international crude oil, U.S. product, international product and intermediate products as the **petroleum** commodity...13. The method of claim 11 further comprising: accessing dynamic databases including **petroleum** product specifications as inputs to the linear program...17. The method of claim 15 further comprising: accessing dynamic databases including **petroleum** product specifications as inputs to the linear program...21. The method of claim 19 further comprising: accessing dynamic databases including **petroleum** product specifications as inputs to the linear program...25. The method of claim 23 further comprising: accessing dynamic databases including **petroleum** product specifications as inputs to the linear program...
- ...29. The method of claim 27 further comprising: accessing dynamic databases including **petroleum** product specifications as inputs to the linear program...31. The method of claim 27 wherein the **petroleum** products include specific grades of gasoline and the linear program calculates the marginal value of...
- ...32. The method of claim 27 wherein the **petroleum** products include specific grades of fuel oil and the linear program calculates the marginal value...33. The method of claim 1 wherein the **petroleum** products include specific grades of distillate and the linear program calculates the marginal value of...
- ...to draw a between two geographical regions and selecting specific crude oil, intermediate feedstock and **petroleum** products as members of the arbitrage relationship...



...38. The method of claim 37 wherein the domain is at least one of:  
**petroleum** trading, refining or logistics.

4/K/23 (Item 13 from file: 654)

DIALOG(R)File 654:US Pat.Full.

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0004980862 \*\*IMAGE Available

Derwent Accession: 2002-425072

**Multiple portal distributed business/information system and method**

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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020035483	A1	20020321	US 2001955330	20010918
Provisional				US 60-233849	20000920

Fulltext Word Count: 10054

#### Summary of the Invention:

...purpose, of such as but not limited to  
business/trade/commerce/information-handling/communications/transactions/  
**supply chain management** (SCM)/client relation management (CRM or  
eCRM)/other process processes, is selected/designed by using...carry out  
such as, but not limited to  
business/trade/commerce/information-handling/communications/transactions/  
**supply chain management** (SCM)/client relation management (CRM or  
eCRM)other process functions/processes...carry out such as but not  
limited to  
business/trade/commerce/information-handling/communications/transactions/  
**supply chain management** (SCM)/client relation management (CRM or  
eCRM)/marketing/other process processes, and then optionally using...and  
operations, commerce networking and operations, information system  
networking and operations, transactions systems and operations, **supply**  
**chain management** (SCM) systems and operations, client relation  
management (CRM or eCRM) systems and operations, production/plant...

#### Description of the Invention:

...request for quotations (RFQ), Purchase Orders (PO), various  
procurement functions, planning financial and such transactions, **supply**  
**chain management** (SCM), Client relations management (CRM),  
Transactions Handling, Optimizations, marketing and, functions and  
function handling computer...0097] 1. One float A), with, but not  
limited to, SCM ( **Supply Chain Management** ) criteria, splits into two  
(C and D) with one (C) branching and polling/posting within...0129]  
**Petroleum**

[...0142] **Supply Chain Management**

#### Non-exemplary or Dependent Claim(s):

...repositories/transactions/information-handling such as but not limited  
to products/negotiations/purchase/order/marketing/ **supply - chain -**  
**management** processes/client-relations management  
processes/transaction-processes/other processes;

4/K/24 (Item 14 from file: 654)

DIALOG(R)File 654:US Pat.Full.

(c) Format only 2004 The Dialog Corp. All rts. reserv.

0004947857 \*\*IMAGE Available

Derwent Accession: 2001-582521

**Method for providing control to an industrail process using one or more**

**multidimensional variables**

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Bethsabeth Munoz, INV  
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	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent	US 20020002414	A1	20020103	US 2001802519	20010309
Provisional				US 60-188565	20000310
Provisional				US 60-188590	20000310
Provisional				US 60-188591	20000310

Fulltext Word Count: 20373

**Summary of the Invention:**

...an operator or user of the process through an electronic display.  
For example, refining a **petroleum** product such as oil or gas often uses  
temperature measurements of raw or in process...

**Description of the Invention:**

...also include Enterprise Resource Planning (ERP) and other  
e-enterprise systems 186, as well as **Supply Chain Management** (SCM)  
systems. The legacy systems may further include equation-based models 188  
for predicting process...sufficient information to calculate appropriate  
set point values for one or more temperatures in a **petroleum** cracking  
process, such as the temperature profile for the first in a series of  
reactors...such as a process control device, or to an external entity  
such as associated s **supply chain management** system (SCM), or to  
both internal and external systems. For example, where the third  
descriptor...

**Non-exemplary or Dependent Claim(s):**

2. The method of claim 1 wherein the substance is selected from a  
**petroleum** product, a chemical product, a food product, a health  
product, a cleaning product, a biological...12. The method of claim  
11 wherein the substance is selected from a **petroleum** product, a  
chemical product, a food product, a health product, a cleaning  
product, a biological...

4/K/25 (Item 1 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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06671479 E.I. No: EIP03527799656

**Title: Refinery inventory management**

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China  
Source: Huagong Xuebao/Journal of Chemical Industry and Engineering  
(China) v 54 n 8 August 2003. p 1118-1121  
Publication Year: 2003  
CODEN: HUKHAI ISSN: 0438-1157  
Language: Chinese

...Abstract: chain cost. Therefore, the study of inventory management  
plays an important role in that of **supply chain management**. In a  
refinery, the outputs of different kinds of oil products are not mutually  
independent...

Descriptors: **Petroleum** refineries; Inventory control; Management;

Production control; Optimization; **Petroleum** products; Gasoline; Costs

4/K/26 (Item 2 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06616433 E.I. No: EIP03477735548  
**Title: Object oriented modeling and decision support for supply chains**  
Author: Biswas, S.; Narahari, Y.  
Corporate Source: Electronic Enterprises Laboratory Computer Science and Automation Indian Institute of Science, Bangalore 560 012, India  
Source: European Journal of Operational Research v 153 n 3 SPEC. ISS. Mar 16 2003. p 704-726  
Publication Year: 2003  
CODEN: EJORDT ISSN: 0377-2217  
Language: English

...Abstract: implemented a prototype of DESSCOM. We provide a real-world case study of a liquid **petroleum** gas supply chain to demonstrate the use of DESSCOM to model supply chains and enable...

Identifiers: **Supply chain management** (SCM)

4/K/27 (Item 3 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06466965 E.I. No: EIP03307568576  
**Title: Application of H// infinity control strategies of bullwhip effect in supply chain**  
Author: Huang, Xiao-Yuan; Lu, Zhen  
Corporate Source: Sch. of Bus. and Mgmt. Northeastern Univ., Shenyang 110004, China  
Source: Kongzhi yu Juece/Control and Decision v 18 n 2 March 2003. p 155-158  
Publication Year: 2003  
CODEN: KYJUEF ISSN: 1001-0920  
Language: Chinese

...Abstract: of demand variability, the optimal decision of supply chain manage is made. A simulation of **petroleum** distribute system is done. The simulation result shows that H// infinity control of the supply...

Descriptors: Inventory control; Management; Mathematical models; Optimization; Decision making; Computer simulation; **Petroleum** engineering  
Identifiers: **Supply chain management** ; H infinite control; Bullwhip effect; Warp wave method; Multi echelon models; Demand variability

4/K/28 (Item 4 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06459093 E.I. No: EIP03307558856  
**Title: UK steel forum - An annual review**  
Author: Anon  
Source: Steel Times International v 27 n 4 June 2003. p 68-74  
Publication Year: 2003  
CODEN: STTIDD ISSN: 0143-7798  
Language: English

...Abstract: EEF). The conference included technical presentations under the theme 'Steel & Energy' and a seminar on **supply chain management** organized by Metal Industry Competitive Enterprise. (Edited abstract)

...Descriptors: presentations; Industrial economics; International trade; Production control; Public policy; Privatization; Environmental impact; Electric rates; Crude **petroleum** ; Renewable energy resources; Personnel training

Identifiers: **Supply chain management**

4/K/29 (Item 5 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06209478 E.I. No: EIP02477222670

**Title: Agent-based supply chain management - 2: A refinery application**

Author: Julka, Nirupam; Srinivasan, Rajagopalan; Karimi, I.  
Corporate Source: Department of Chemical Engineering National University of Singapore, Singapore 117576, Singapore  
Source: Computers and Chemical Engineering v 26 n 12 Dec 15 2002. p 1771-1781  
Publication Year: 2002  
CODEN: CCENDW ISSN: 0098-1354  
Language: English

**Title: Agent-based supply chain management - 2: A refinery application**

...Abstract: framework for supply chain DSSs. Here, we demonstrate its application through a prototype DSS, called **petroleum** refinery integrated supply chain modeler and simulator or PRISMS, for crude procurement. PRISMS serves as...

Descriptors: Chemical engineering; Industrial management; Crude **petroleum** ; Decision support systems; Decision making; Scheduling  
Identifiers: **Supply chain management**

4/K/30 (Item 6 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06150484 E.I. No: EIP02397115904

**Title: Progress of e-business in chemical industries**  
Author: Yang, You-Qi  
Corporate Source: China Natl. Chem. Info. Cent., Beijing 100029, China  
Source: Huagong Xiandai/Modern Chemical Industry v 22 n 1 January 2002. p 22-26  
Publication Year: 2002  
CODEN: HTKUDJ ISSN: 0253-4320  
Language: Chinese

...Abstract: e-commerce concept in the chemical industry, the development and progress of e-business, especially **supply chain management**, in chemical sectors were summarized. It is pointed out that the four phases of e-business development in **petroleum** and chemical enterprises include portal establishment, value chain integration, enterprise transition and convergence. 16 Refs.

Identifiers: Electronic business; **Supply chain management** ; Development; Portal establishment; Value chain integration

4/K/31 (Item 7 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05724296 E.I. No: EIP00125436501

**Title: Raw material report**  
Author: Savastano, David  
Source: Ink World v 6 n 9 Sep 2000. p 34-36  
Publication Year: 2000  
CODEN: INWOFW ISSN: 1093-328X  
Language: English

...Abstract: price increases for critical supplies, affecting manufacturers across the raw material spectrum, from resins to **petroleum** distillates. Pigment manufacturers are also looking closely at their costs, and may have to seek...

Descriptors: Ink; Industry; Raw materials; Costs; Crude petroleum ;  
Resins; Waxes; Carbon black; Titanium dioxide; Solvents  
Identifiers: Printing ink industry; Supply chain management

4/K/32 (Item 8 from file: 8)  
DIALOG(R) File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05716070 E.I. No: EIP00115421961  
**Title: Planning logistics operations in the oil industry**  
Author: Dempster, M.A.H.; Pedron, N. Hicks; Medova, E.A.; Scott, J.E.;  
Sembos, A.  
Corporate Source: Univ of Cambridge, Cambridge, UK  
Source: Journal of the Operational Research Society v 51 n 11 Nov 2000. p  
1271-1288  
Publication Year: 2000  
CODEN: JORSZD ISSN: 0160-5682  
Language: English

Descriptors: Operations research; Petroleum industry; Strategic  
planning; Resource allocation; Linear programming; Random processes;  
Scheduling; Costs; Mathematical models; Decision theory  
Identifiers: Supply chain management ; Stochastic linear programming

4/K/33 (Item 9 from file: 8)  
DIALOG(R) File 8:Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

04192315 E.I. No: EIP95062758100  
**Title: Brief: making alliances work - using a computer-based management  
system to integrate the supply chain**  
Author: Johnson, J.B.; Randolph, Scott  
Corporate Source: Amoco Production Co  
Source: JPT, Journal of Petroleum Technology v 47 n 6 Jun 1995. p 512-513  
Publication Year: 1995  
CODEN: JPTJAM ISSN: 0149-2136  
Language: English

Descriptors: Petroleum industry; Computer applications; Industrial  
management; Industrial relations; Computer software; Project management;  
Performance; Standards  
Identifiers: Computer based management system; Supply chain  
management ; Drilling management system

4/K/34 (Item 1 from file: 65)  
DIALOG(R) File 65:Inside Conferences  
(c) 2004 BLDSC all rts. reserv. All rts. reserv.

02448742 INSIDE CONFERENCE ITEM ID: CN025578828  
**Resource sharing and strategic alliances-reduction of oilfield costs  
through innovative supply chain management**  
Schenk, A. R. J.  
CONFERENCE: Australian Petroleum Production and Exploration Association-  
Conference  
APPEA JOURNAL, 1998; VOL 38; NUMBER 1 P: 570-576  
APPEA, 1998  
ISSN: 1326-4966  
LANGUAGE: English DOCUMENT TYPE: Conference Papers  
CONFERENCE SPONSOR: Australian Petroleum Production and Exploration  
Association ( APPEA)  
CONFERENCE LOCATION: Canberra  
CONFERENCE DATE: Mar 1998 (199803) (199803)

**Resource sharing and strategic alliances-reduction of oilfield costs  
through innovative supply chain management**  
DESCRIPTORS: APPEA; petroleum production

4/K/35 (Item 1 from file: 87)  
DIALOG(R)File 87:TULSA (Petroleum Abs)  
(c)2004 The University of Tulsa. All rts. reserv.

01087856 PETROLEUM ABSTRACTS NO.: 826094  
SUPPLY CHAIN MANAGEMENT IN THE PETROLEUM INDUSTRY  
ALLURI R R  
TATA INFOTECH  
5TH INDIAN OIL CORP LTD INT PETROL CONF (PETROTECH-2003) (NEW DELHI,  
INDIA, 1/9-12/2003) PROC V 8, 2003 (ISBN 81-88039-14-4; AVAILABLE ON  
CD-ROM; 7 PP)  
2003  
ISBN: 81-88039-14-4  
LANGUAGE: ENGLISH

SUPPLY CHAIN MANAGEMENT IN THE PETROLEUM INDUSTRY  
...MAJOR DESCRIPTORS: PETROLEUM INDUSTRY

4/K/36 (Item 2 from file: 87)  
DIALOG(R)File 87:TULSA (Petroleum Abs)  
(c)2004 The University of Tulsa. All rts. reserv.

01074920 PETROLEUM ABSTRACTS NO.: 813158  
ROLE OF IT (INFORMATION TECHNOLOGY) IN BUSINESS PROCESS RE-ENGINEERING OF  
SUPPLY CHAIN MANAGEMENT IN PETROLEUM MARKETING  
BHATTACHARYA S  
INDIAN OIL CORP LTD  
4TH INDIAN OIL CORP LTD INT PETROL CONF (PETROTECH 2001) (NEW DELHI,  
INDIA, 1/9-12/2001) PROC 2001 (AVAILABLE ON CD-ROM; 6 PP)  
2001  
LANGUAGE: ENGLISH

ROLE OF IT (INFORMATION TECHNOLOGY) IN BUSINESS PROCESS RE-ENGINEERING OF  
SUPPLY CHAIN MANAGEMENT IN PETROLEUM MARKETING  
...MINOR DESCRIPTORS: PETROLEUM ; ...

... PETROLEUM INDUSTRY

4/K/37 (Item 3 from file: 87)  
DIALOG(R)File 87:TULSA (Petroleum Abs)  
(c)2004 The University of Tulsa. All rts. reserv.

00964894 PETROLEUM ABSTRACTS NO.: 703127  
SUPPLY CHAIN MANAGEMENT : WHY PURSUE SINGLE-SOURCE SUPPLIER  
RELATIONSHIPS  
BOUDREAUX W G  
DANOS & CUROLE MAR CONTR  
OFFSHORE INT V 59, NO 5, PP 156-157,179, MAY 1999 (ISSN 00300608)  
1999  
ISSN: 0030-0608  
LANGUAGE: ENGLISH

SUPPLY CHAIN MANAGEMENT : WHY PURSUE SINGLE-SOURCE SUPPLIER  
RELATIONSHIPS  
...MINOR DESCRIPTORS: PETROLEUM ; ...

... PETROLEUM INDUSTRY

4/K/38 (Item 1 from file: 89)  
DIALOG(R)File 89:GeoRef  
(c) 2004 American Geological Institute. All rts. reserv.

02610815 GEOREF: 03-040110  
TITLE: Evolution of gas exploitation in the eastern Green River basin,

**Carbon and Sweetwater counties, Wyoming, 1990-1998**

AUTHOR(S): Billingsley, Randal L.  
CORPORATE SOURCE: Advanced Resources International, United States  
MONOGRAPH TITLE: **Wyoming gas resources and technology**  
AUTHOR(S): Crockett, Fred  
EDITOR(S): Stilwell, Dean P.  
CONFERENCE TITLE: Wyoming Geological Association fifty-second field  
conference  
CONFERENCE LOCATION: Casper, WY, United States,  
CONFERENCE DATE: 2001  
PUBLISHER: Wyoming Geological Association, Casper, WY, United States  
SOURCE: Guidebook - Wyoming Geological Association vol. 52 p. 131-147  
DATE: 2001  
CODEN: WGGCAG ISSN: 0160-2829  
LANGUAGE: English

...ABSTRACT: slant hole production tests were attempts to improve reservoir understanding and prospect economics. Wellbore redesign, **supply - chain management** and "alliance" concepts were applied to control and reduce costs. By 1998, the exploitation model...  
...DESCRIPTORS: Wyoming; cost; economics; exploitation; geophysical methods ; geophysical profiles; geophysical surveys; Green River basin; natural gas; **petroleum** ; production; reservoir rocks; resources; seismic methods ; seismic profiles; surveys; Sweetwater County Wyoming; technology; three-dimensional...

**4/K/39 (Item 1 from file: 94)**

DIALOG(R) File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

05582137 JICST ACCESSION NUMBER: 03A0661275 FILE SEGMENT: JICST-E  
**Development of Dynamic Optimum Integrated Operation Planning System based on the Supply Chain Management approach**  
CHANO KEIZO (1); KUMAGAE SHUJI (1); MATSUMOTO SHIGEKAZU (1); YAMADA HIROSHI (1); MATSUMURA HIDETO (2); ANDO FUMIHARU (2)  
(1) Shinnihonsekiyu; (2) Cosmo Oil Co., Ltd., JPN  
Interijento. Shisutemu, Shinpojiumu Koen Ronbunshu, 2002, VOL.12th,  
PAGE.17-20, FIG.7, REF.6  
JOURNAL NUMBER: L1193AAF  
UNIVERSAL DECIMAL CLASSIFICATION: 65.01  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Conference Proceeding  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

**Development of Dynamic Optimum Integrated Operation Planning System based on the Supply Chain Management approach**  
...ABSTRACT: same region, integrated operation planning system for oil refineries has been developed based on the **supply chain management** approach. (author abst.)  
DESCRIPTORS: **petroleum** industry...  
... **petroleum** refining

**4/K/40 (Item 2 from file: 94)**

DIALOG(R) File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

04352103 JICST ACCESSION NUMBER: 99A0868263 FILE SEGMENT: JICST-E  
**System application. Intelligent solution sending system from the viewpoint of SCM. Application to a batch factory.**  
SHIMA KAZUMI (1); OKUDA OSAMU (1)  
(1) Toyo Eng. Corp.  
Keiso, 1999, VOL.42,NO.11, PAGE.66-70, FIG.7, REF.1  
JOURNAL NUMBER: F0485AAW ISSN NO: 0368-5780 CODEN: KISOB  
UNIVERSAL DECIMAL CLASSIFICATION: 658.52  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

ABSTRACT: SCM ( **supply chain management** ) has been proposed recently.  
Its objective is to synchronize upstream and downstream and to raise...  
...BROADER DESCRIPTORS: **lubricant** (machine

4/K/41 (Item 3 from file: 94)  
DIALOG(R) File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

04209301 JICST ACCESSION NUMBER: 99A0612211 FILE SEGMENT: JICST-E  
**Computerization and instrumentation". Insight into the trend of production  
and information systems in the new era. The second. Supply chain  
management and concurrent engineering. ABB "ISP". Part 2.**

WADA TETSUYA (1)

(1) Puroakutsu

Keiso, 1999, VOL.42,NO.7, PAGE.90-95, FIG.4, REF.1

JOURNAL NUMBER: F0485AAW ISSN NO: 0368-5780 CODEN: KISOB

UNIVERSAL DECIMAL CLASSIFICATION: 658.5

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

...Insight into the trend of production and information systems in the new  
era. The second. Supply chain management and concurrent  
engineering. ABB "ISP". Part 2.

ABSTRACT: This paper clarifies the concept of " **supply chain management**  
" by referring to reference literatures and explains the idea that  
**supply chain management** requires the structure of "concurrent  
engineering". Most **supply chain management** applications cover  
only planning and scheduling phases (P&S), but ISP also offers an  
application...

...paper refers to MM&S and P&S, and introduces the practical example in a  
**petroleum** company, PDVSA. And, the paper proposes a direction for  
solving common problems which engineers of...

4/K/42 (Item 4 from file: 94)  
DIALOG(R) File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

04024164 JICST ACCESSION NUMBER: 99A0288289 FILE SEGMENT: JICST-E  
**Petroleum industry and supply chain management in Japan.**

SUMIYOSHI TATSUNORI (1)

(1) Idemitsu Petrochem. Co., Ltd.

Sekiyu, Sekiyu Kagaku Toronkai Koen Yoshi, 1998, VOL.28th, PAGE.381-382,  
REF.4

JOURNAL NUMBER: S0880ABB

UNIVERSAL DECIMAL CLASSIFICATION: 665.6/.7 658.81/.89 681.3.02:651.2

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

**Petroleum industry and supply chain management in Japan.**

DESCRIPTORS: **petroleum** industry...

... **petroleum** refining

4/K/43 (Item 1 from file: 103)  
DIALOG(R) File 103:Energy SciTec  
(c) 2004 Contains copyrighted material. All rts. reserv.

04848096 GB



**Title: Back to basics with e-business**

Author(s): Thomas, V.

Hydrocarbon Engineering

Source: Hydrocarbon Engineering ; VOL. 6 ; ISSUE: 7 ; PBD: Jul 2001 ISSN: 1468-9340

Publication Date: 20010701

Availability Date: 20021015

Report Number(s): NONE

OSTI Number(s): DE20282843

Contract Number (Non-DOE): TRN GB0250753

Language: English

Medium/Dimensions: page(s) 16-20

...Abstract: opportunities for traditional power companies offered by e-business in the areas of procurement, collaboration, **supply chain management**, cataloguing, and auctions. BP's interest in e-business-to-customer (B2C) and e-business...

...Descriptors: **PETROLEUM** INDUSTRY

**4/K/44** (Item 2 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2004 Contains copyrighted material. All rts. reserv.

04820443 CANM

**Title: Adding dimensions: Safety, environment join cost and speed atop industry agenda**

Author(s): Jaremkko, G.

Oilweek Magazine

Source: Oilweek Magazine ; VOL. 53 ; ISSUE: 18 ; PBD: 6 May 2002 ISSN: 1207-7933

Publication Date: 20020506

Availability Date: 20020722

Report Number(s): NONE

OSTI Number(s): DE20258200

Contract Number (Non-DOE): TRN CA0201372

Language: English

Medium/Dimensions: page(s) 18-19, 21-22

...Abstract: managers, and hire separate specialists to execute their plans. By 1999, the Canadian Association of **Petroleum** Producers (CAPP) estimated that 80 per cent of the exploration and production houses' capital budgets...

...sector have outnumbered the staff of exploration and production companies. The relationship centres around the '**supply chain management**' concept, where the exploration and production firms look for lasting arrangements with specialty companies to...

...price that has to be paid and the message is beginning to catch on. The **Petroleum** Technology Alliance estimates that its membership accounts for better than 60 per cent of Canadian...

Descriptors: **PETROLEUM** INDUSTRY...

**4/K/45** (Item 3 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2004 Contains copyrighted material. All rts. reserv.

04558851 EDB-00-026630

**Title: Rising light consolidation, SCM introduction in October**

Original Title: Idemitsu sekika, 10 gatsu SCM donyu

Source: Petrotech (Tokyo) v 22:9. ISSN: 0386-2763

Publication Date: 1 Sep 1999

p 740

Language: Japanese

Abstract: Idemitsu Petrochemical constructs received order and physical distribution system using the internet, and **supply chain**

management (SCM) is introduced from October. The speedup of the design of stock compression and personnel...

...Descriptors: **PETROLEUM** ; ...

... **PETROLEUM** PRODUCTS...

... **PETROLEUM** INDUSTRY

...Broader Terms: **PETROLEUM** PRODUCTS...

... **PETROLEUM** DISTILLATES...

... **PETROLEUM** INDUSTRY...

... **PETROLEUM** FRACTIONS...

... **PETROLEUM** ;

4/K/46 (Item 4 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2004 Contains copyrighted material. All rts. reserv.

04558787 EDB-00-026566

Title: 1998 fiscal year management information subcommittee activity progress reports (1)

Original Title: Heisei 10 nendo keiei johobukai katsudo seikahokoku (1)

Source: Petrotech (Tokyo) v 22:7. ISSN: 0386-2763

Publication Date: 1 Jul 1999

p 602-604

Language: Japanese

Abstract: In severe management environment which surrounded **petroleum** industry of Japan, this subcommittee carried out subcommittee activity which made 'ideal way of information technology, information system, management information in the management' to be a theme. (1) **Petroleum** industry and **supply chain management** of Japan. (2) The application of the mathematical science technique Japanesque from the custom for getting out. (3) CALS in the **petroleum** industry. (4) Opening and security in the refinery. (NEDO)

Descriptors: **PETROLEUM** ; ...

... **PETROLEUM** PRODUCTS...

... **PETROLEUM** REFINERIES...

... **PETROLEUM** INDUSTRY

4/K/47 (Item 5 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2004 Contains copyrighted material. All rts. reserv..

03871906 INS-95-017526; EDB-95-115674

Title: Making alliances work -- Using a computer-based management system to integrate the supply chain

Author(s): Johnson, J.B. (Amoco Production Co., Houston, TX (United States)); Randolph, S. (OGCI Management Inc., Tulsa, OK (United States))

Source: JPT, Journal of Petroleum Technology (United States) v 47:6.

Coden: JPTJAM ISSN: 0149-2136

Publication Date: Jun 1995

p 512-513

Language: English

...Abstract: that has led the company to a proven strategy for goods and services procurement called **supply - chain management** (SCM).

However, the company found that managing compact, integrated supply chains is not always easy...

...Major Descriptors: **PETROLEUM** INDUSTRY -- CONTRACT MANAGEMENT

4/K/48 (Item 1 from file: 354)  
DIALOG(R) File 354: Ei EnCompassLit(TM)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

728585 EnCompassLit Document No.: 200401155  
**HPIn Europe: The intelligent refinery - Or is it?**  
Author: Pitt R.  
Source: Hydrocarbon Processing 82/12 11 (ISSN 0018--8190) (December 2003)  
Language: English  
ISSN: 0018--8190  
CODEN: HYPRA  
Journal Name: Hydrocarbon Processing  
Document Type: JOURNAL ARTICLE  
Publication Date: 031200

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... Shell looked further and started to work with i2, skilled in  
**supply chain management** .  
...Assigned Terms: HYDROCARBON PROCESSING INDUSTRY; \*OIL REFINERY;  
OPERATOR; PERSONNEL; **PETROLEUM** INDUSTRY; \*PROCESS CONTROL; REAL TIME;  
SHELL OIL...  
...Index Terms: INDUSTRIAL PLANT; \*OIL REFINERY; OPERATOR; PERSONNEL;  
**PETROLEUM** INDUSTRY; \*PROCESS CONTROL; \*PROGRAMING; REAL TIME; SHELL  
...

4/K/49 (Item 2 from file: 354)  
DIALOG(R) File 354: Ei EnCompassLit(TM)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

711217 EnCompassLit Document No.: 200310590  
**HPIntegration strategies: Dow sees collaboration as the key to operational excellence**  
Author: Hill D.; Walker M.  
Corporate Source: ARC Advisory Group  
Source: Hydrocarbon Processing 82/5 17-18 (ISSN 0018--8190) (May 2003)  
Language: English  
ISSN: 0018--8190  
CODEN: HYPRA  
Journal Name: Hydrocarbon Processing  
Document Type: JOURNAL ARTICLE; REVIEW  
Publication Date: 030500

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... for process control that includes ABB's commercial  
Industrial(sup)I(sup)T DCS; Dow' **supply chain management**  
organization established in 1980's; the lifecycle management; and the  
management of change as another...

4/K/50 (Item 3 from file: 354)  
DIALOG(R) File 354: Ei EnCompassLit(TM)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

698262 EnCompassLit Document No.: 200218834  
**Agent-based supply chain management - 2: A refinery application**  
Author: Srinivasan R.; Julka N.; Karimi I.  
Corporate Source: Department of Chemical Engineering, National University  
of Singapore; Singapore Inst. of Mfg. Technology  
Source: Computers and Chemical Engineering 26/12 1771-1781 (ISSN  
0098--1354) (20021215)  
Language: English  
ISSN: 0098--1354  
CODEN: CCEND

Journal Name: Computers and Chemical Engineering  
Document Type: JOURNAL ARTICLE  
Publication Date: 021215

**Agent-based supply chain management -**

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
PETROCHEMICALS

**Abstract:**

... The application of a prototype DSS called **petroleum** refinery  
integrated supply chain modeler and simulator (PRISMS) for crude  
procurement was discussed...

4/K/51 (Item 4 from file: 354)

DIALOG(R) File 354:Ei EnCompassLit(TM)

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

696208 EnCompassLit Document No.: 200216780

**E-strategy news: Jet-A.com, an open, independent portal for jet fuel**

Source: Hydrocarbon Asia 11/1 59 (ISSN 0217--1112) (January/February 2001)

Language: English

ISSN: 0217--1112

Journal Name: Hydrocarbon Asia

Document Type: JOURNAL ARTICLE

Publication Date: 010100

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
PETROCHEMICALS

**Abstract:**

... The portal will use industry-wide standard fuel **supply chain**  
**management** practices, while allowing the flexibility to address the  
specific needs of individual users...

4/K/52 (Item 5 from file: 354)

DIALOG(R) File 354:Ei EnCompassLit(TM)

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

687424 EnCompassLit Document No.: 200207994

**Supply chain management in petroleum industry**

Author: Takahashi T.

Source: Petrotech 25/1 63-69 (ISSN 0386--2763) (January 2002)

Language: Japanese

ISSN: 0386--2763

Journal Name: Petrotech

Document Type: JOURNAL ARTICLE; REVIEW

Publication Date: 020100

**Supply chain management in petroleum industry**

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
PETROCHEMICALS

**Abstract:**

A discussion covers **petroleum** industry value chain; size and  
benefits of solution object; effect of solution scale on investment...  
...Assigned Terms: INVENTORY CONTROL; INVESTMENT; MARKETING; OIL REFINERY;  
\* **PETROLEUM** INDUSTRY; PLANNING; REVIEW; SALES; SUPPLY  
...Index Terms: INVESTMENT; MANAGEMENT; MARKETING; OIL REFINERY; \*  
**PETROLEUM** INDUSTRY; PLANNING; PROGRAMING; REVIEW; SALES...

4/K/53 (Item 6 from file: 354)

DIALOG(R) File 354:Ei EnCompassLit(TM)

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683860 EnCompassLit Document No.: 200204428

**How to manage your refining supply chain from E-to-E**

Author: Weitzel D.

Corporate Source: Aspen Technology

Source: World Refining 10/10 42-44 (ISSN 1087--4003) (December 2000)

Language: English  
ISSN: 1087--4003  
CODEN: FUREE  
Journal Name: World Refining  
Document Type: JOURNAL ARTICLE; REVIEW  
Publication Date: 000000

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... end-to-end refining supply-chain solutions and refining-specific trade exchanges; benefits from integrated **supply - chain management** systems, e.g., reduced manpower in managing the supply chain, reduced inefficiencies and costs, etc...

...Assigned Terms: DEMAND; MATHEMATICAL MODEL; OIL REFINERY; PERSONNEL REDUCTION; \* **PETROLEUM** INDUSTRY; PLANNING; REAL TIME; RETAIL; REVIEW

...Index Terms: MATHEMATICAL MODEL; MODEL; OIL REFINERY; PERSONNEL REDUCTION; \* **PETROLEUM** INDUSTRY; PLANNING; REAL TIME; RETAIL; REVIEW

4/K/54 (Item 7 from file: 354)  
DIALOG(R) File 354:Ei EnCompassLit(TM)  
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680354 EnCompassLit Document No.: 200200922

**Software updated at Interkama. Technip takes on Intergraph's Marian for worldwide use**

Original Title: Zur Interkama software aktualisiert. Technip setzt Marian von Intergraph weltweit ein

Source: CIT Plus 4/10 32-33 (ISSN 1436--2597) (2001)

Language: German

ISSN: 1436--2597

Journal Name: CIT Plus

Document Type: JOURNAL ARTICLE

Publication Date: 010000

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... Duesseldorf 9/24-28/2001), the process automation trade fair, Marian, an integrated material and **supply chain management** solution was demonstrated...

...is one of the world's leading companies in facilities planning and construction for the **petroleum** and petrochemical industry...

...Assigned Terms: EUROPE; INVENTORY CONTROL; ORGANIZATION; PETROCHEMICAL INDUSTRY; **PETROLEUM** INDUSTRY; PLANNING; POWER PLANT; RISK MANAGEMENT; SUPPLY...

...Index Terms: MANAGEMENT; NORTH AMERICA; ORGANIZATION; PETROCHEMICAL INDUSTRY; **PETROLEUM** INDUSTRY; PLANNING; POWER PLANT; PROGRAMING; RISK MANAGEMENT...

4/K/55 (Item 8 from file: 354)  
DIALOG(R) File 354:Ei EnCompassLit(TM)  
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674778 EnCompassLit Document No.: 200113859

**Green engineering: Environmentally conscious design of chemical processes and products**

Author: Allen D.T.; Shonnard D.R.

Corporate Source: Dept. of Chemical Engineering, University of Texas;

Dept. of Chemical Engineering, Michigan Technological University

Source: AIChE Journal 47/9 1906-1910 (ISSN 0001--1541) (September 2001)

Language: English

ISSN: 0001--1541

CODEN: AICEA

Journal Name: AIChE Journal  
Document Type: JOURNAL ARTICLE; REVIEW  
Publication Date: 010000

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... methyl methacrylate); improving environmental performance of  
chemical processes and products; and integrating process design with  
**supply chain management** and product stewardship...

4/K/56 (Item 9 from file: 354)  
DIALOG(R)File 354:Ei EnCompassLit(TM)  
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668454 EnCompassLit Document No.: 200107307  
**Technology update: Industry news - Aspen Technology to manage BP's  
fuel-distribution outlets**  
Source: National Petroleum News 92/12 30 (ISSN 0149--5267) (November 2000)  
Language: English  
ISSN: 0149--5267  
Journal Name: National Petroleum News  
Document Type: JOURNAL ARTICLE  
Publication Date: 000000

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... using the retail supply chain solution, the agreement creates  
the world's largest integrated retail **petroleum supply - chain  
management** system, bringing the total number of BP retail sites using  
AspenTech's supply chain solution...

4/K/57 (Item 10 from file: 354)  
DIALOG(R)File 354:Ei EnCompassLit(TM)  
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659228 EnCompassLit Document No.: 200024471  
**Chemical companies establish an electronic marketplace for global  
transactions, logistics, and supply chain management**  
Original Title: Chemieunternehmen grunden elektronischen marktplatz fur  
weltweite transaktionen, logistik und **supply chain management**  
Source: Erdol Erdgas Kohle 116/10 476 (ISSN 0179--3187) (October 2000)  
Language: German  
ISSN: 0179--3187  
CODEN: EEKOE  
Journal Name: Erdol Erdgas Kohle  
Document Type: JOURNAL ARTICLE  
Publication Date: 000000

**Chemical companies establish an electronic marketplace for global  
transactions, logistics, and supply chain management**  
Original Title: Chemieunternehmen grunden elektronischen marktplatz fur  
weltweite transaktionen, logistik und **supply chain management**

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Assigned Terms: AMOCO; BADISCHE ANILIN; BRITISH **PETROLEUM** ; COST REDUCTION  
; DU PONT; FARBENFABRIKEN BAYER; HAAS...  
Index Terms: AMOCO; BADISCHE ANILIN; BRITISH **PETROLEUM** ; \*BUSINESS  
OPERATION; COST; COST REDUCTION; DU PONT...

4/K/58 (Item 11 from file: 354)  
DIALOG(R)File 354:Ei EnCompassLit(TM)  
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653900 EnCompassLit Document No.: 200018379

**Chain management for petroleum logistics from the point of view of a logistics servicer**

Original Title: Chain-management fur die mineralollogistik aus der sicht eines logistikdienstleisters

Author: Makait M.

Corporate Source: VTG-Lehnkering AG

Source: Erdol Erdgas Kohle 116/6 308-310 (ISSN 0179--3187) (June 2000)

Language: German

ISSN: 0179--3187

CODEN: EEKOE

Journal Name: Erdol Erdgas Kohle

Document Type: JOURNAL ARTICLE

Publication Date: 000000

**Chain management for petroleum logistics from the point of view of a logistics servicer**

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND PETROCHEMICALS

**Abstract:**

The **petroleum** market in Europe in past years has basically changed...

...The sales of **petroleum** products in Germany have stagnated since several years at 127-128 million ton...

...Germany, the concentration of production to fewer locations and an increasing flow of imports in **petroleum** products lead to increased transport revenue...

...Besides integrated logistics servicing and logistics management, **supply chain management** functions also take over...

...Assigned Terms: INVENTORY CONTROL; \*LOGISTICS; \*MANAGEMENT; OIL REFINERY; **PETROLEUM** FRACTION; \* **PETROLEUM** INDUSTRY; PREDICTION; SALES; SHELL OIL; SUPPLY...

...Index Terms: INVENTORY CONTROL; \*LOGISTICS; \*MANAGEMENT; OIL REFINERY; **PETROLEUM** FRACTION; \* **PETROLEUM** INDUSTRY; PREDICTION; RAILROAD ROLLING STOCK; SALES; SHELL...

4/K/59 (Item 12 from file: 354)

DIALOG(R) File 354:Ei EnCompassLit(TM)

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645580 EnCompassLit Document No.: 200009688

**Optimization goes enterprise-wide**

Author: Fouhy K.

Source: Chemical Engineering 107/4 153-156 (ISSN 0009--2460) (April 2000)

Language: English

ISSN: 0009--2460

CODEN: CHEEA

Journal Name: Chemical Engineering

Document Type: JOURNAL ARTICLE

Publication Date: 000000

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND PETROCHEMICALS

**Abstract:**

... have been achieved in the fields of process simulation, plant information systems, advanced process control, **supply chain management**, and enterprise resource planning...

4/K/60 (Item 13 from file: 354)

DIALOG(R) File 354:Ei EnCompassLit(TM)

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637941 EnCompassLit Document No.: 200002049

**2000 jobs to go in Dow Chemical merger**

Source: Chemical Engineer -/686 5 (ISSN 0302--0797) (19990819)

Language: English  
ISSN: 0302--0797  
CODEN: CMERA  
Journal Name: Chemical Engineer  
Document Type: JOURNAL ARTICLE  
Publication Date: 990819

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... A further combined cost-reduction program, through procurement savings and improved **supply chain management**, will give \$500 million annual savings...

4/K/61 (Item 14 from file: 354)  
DIALOG(R) File 354:Ei EnCompassLit(TM)  
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637382 EnCompassLit Document No.: 200001490

**Advances in information technology**

Author: Gonzalez R.G.  
Source: World Refining 9/5 72-76 (ISSN 1087--4003) (July/August 1999)  
Language: English  
ISSN: 1087--4003  
CODEN: FUREE  
Journal Name: World Refining  
Document Type: JOURNAL ARTICLE  
Publication Date: 990000

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** REFINING AND  
**PETROCHEMICALS**

Abstract:

... IT investments worth making are those related to computing power, integration, electronic commerce, **supply chain management**, and business intelligence...  
...Assigned Terms: INVENTORY CONTROL; INVESTMENT; MODERNIZATION; \*PETROCHEMICAL INDUSTRY; \* **PETROLEUM** INDUSTRY; SUPPLY...  
...Index Terms: INVESTMENT; MODERNIZATION; MODIFICATION; \*PETROCHEMICAL INDUSTRY; \* **PETROLEUM** INDUSTRY; SUPPLY; TRADE

4/K/62 (Item 15 from file: 354)  
DIALOG(R) File 354:Ei EnCompassLit(TM)  
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0631458 EnCompassLit Document No.: 4606269

**Optimizing refining margins and the supply chain**

Author: Ward J  
Corporate Source: Aspen Technology Inc  
Source: 16th Annual World Fuels Refining Technology and Cleaner Fuels Conference (San Antonio 3/23-25/99) Papers 26P  
Language: English  
Document Type: MEETING PAPER  
Publication Date: 990323

...Ei EnCompassLit Bulletin Headings: **PETROLEUM** PROCESSES...

... **PETROLEUM** REFINING AND PETROCHEM

Abstract:

... refining enterprise; the "Plantelligence" solution for refining; refining responses to drivers; the refining supply chain; **supply chain management** refinery application matrix; the situation and the opportunity; supply chain optimization in the past and...

4/K/63 (Item 16 from file: 354)  
DIALOG(R) File 354:Ei EnCompassLit(TM)  
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0624777 EnCompassLit Document No.: 4602451  
**Even the best (business) plans require execution**  
Author: Carr R  
Corporate Source: Honeywell Inc  
Source: World Refining (ISSN 1087-4003) V9 N.1 43-45,48-50  
(January-February 1999)  
Language: English  
ISSN: 1087-4003  
Publication Date: 990100

...Ei EnCompassLit Bulletin Headings: **PETROLEUM REFINING AND PETROCHEM**  
Abstract:

... continuing problem of low profitability and striving to achieve competitive advantage in the marketplace, many **petroleum** refining companies focus on enterprise resource planning (ERP) as a key business objective...

...Efficient flow of information throughout the organization's supply chain ( **supply chain management** ) provides a foundation for responding to market opportunities, creating optimal production plans, efficient resource allocation...

...Effective execution of true **supply chain management** meets numerous challenges, such as reliable forecasting, efficient follow-through, root-cause and impact analysis...

4/K/64 (Item 17 from file: 354)  
DIALOG(R) File 354:Ei EnCompassLit(TM)  
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0587292 EnCompassLit Document No.: 4404697  
**ACHEMA '97 (Conference) perspective/Improve global competitiveness with supply - chain management**  
Author: Krennek M R  
Corporate Source: Ernst & Young/Wright Killen  
Source: Hydrocarbon Processing (ISSN 0018-8190) V76 N.5 97-98,100 (May 1997)  
Language: English  
ISSN: 0018-8190  
CODEN: HYPRAX  
Journal Name: Hydrocarbon Processing  
Document Type: JOURNAL ARTICLE; MEETING PAPER  
Publication Date: 970500

**ACHEMA '97 (Conference) perspective/Improve global competitiveness with supply - chain management**

...Ei EnCompassLit Bulletin Headings: **PETROLEUM REFINING AND PETROCHEM**  
Abstract:

ACHEMA '97 (Conference) perspective/Improve global competitiveness with **supply - chain management** . ...  
...One option is to use global **supply - chain management** (SCM) strategy to optimize costs in an integrated fashion along the entire product manufacturing and

4/K/65 (Item 1 from file: 624)  
DIALOG(R) File 624:McGraw-Hill Publications  
(c) 2004 McGraw-Hill Co. Inc. All rts. reserv.

01358285  
**RELIANCE: OFFSHORE GAS TO MARKET BY 2006: Find off India now estimated at 14 Tcf**  
Platts Oilgram News June 18, 2003; Pg 2; Vol. 81, No. 116  
Journal Code: PON ISSN: 0163-1284  
Dateline: Singapore  
Word Count: 624 \*Full text available in Formats 5, 7 and 9\*  
BYLINE:

Vandana Hari

TEXT:

...quality, yield and margins," Ambani said, without giving details.

Meanwhile, on Reliance's plans in **petroleum** retailing, he said the company had secured the necessary approvals for setting up 5,800...

...1,500 retail outlets in the first phase, he said, with state-of-the-art **supply chain management** and fleet management systems.

Reliance currently sells its oil products to state marketers Indian Oil Corp, Bharat **Petroleum** Corp Ltd and Hindustan **Petroleum** Corp Ltd.

Overseas, Reliance has struck oil in an onshore block in Yemen, where it ...

...offer any more details.

The Yemen acreage, Block 9, is operated by Calgary-based Calvalley **Petroleum**, which holds a 60% stake. Reliance and Hoodoil, part of Yemen's Hayel Saeed Anam...

COMPANY NAMES (DIALOG GENERATED): Bharat **Petroleum** Corp Ltd ; Calvalley **Petroleum** ; Hayel Saeed Anam Group ; Hindustan **Petroleum** Corp Ltd ; Indian Oil Corp ; Natural Gas Corp ; Reliance Industries

4/K/66 (Item 2 from file: 624)

DIALOG(R)File 624:McGraw-Hill Publications

(c) 2004 McGraw-Hill Co. Inc. All rts. reserv.

01281445

**Randy Johnson**

Intermountain Contractor August, 2002; Pg 16; Vol. 58, No. 8

Journal Code: IC ISSN: 0020-7164

Section Heading: NAMES IN THE NEWS

Word Count: 199 \*Full text available in Formats 5, 7 and 9\*

TEXT:

... recently as purchasing manager for Stewart & Stevenson's Oil Well Service Equipment Group of the **Petroleum** Equipment Division. He holds a bachelors degree in business administration from the University of Houston ...

... Essex to streamline our purchasing processes and will prove invaluable in developing new direction in **supply chain management** to support and grow our business.'''...

4/K/67 (Item 3 from file: 624)

DIALOG(R)File 624:McGraw-Hill Publications

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01153514

**Internet Provides New Venue For Airlines To Fuel Up**

Aviation Week & Space Technology February 19, 2001; Pg 47; Vol. 154, No. 8

Journal Code: AW ISSN: 0005-2175

Section Heading: AIR TRANSPORT

Dateline: THOUSAND OAKS, CALIF.

Word Count: 997 \*Full text available in Formats 5, 7 and 9\*

BYLINE:

BARRY ROSENBERG

TEXT:

... levels people perceived them as being too aggressive for them," said Robert Sturtz, director of **petroleum** purchasing for United Airlines.

Addressing the fact that several incumbent suppliers didn't bid, Sturtz ...

... The portal will address the full range of demands for jet fuel procurement, sales and **supply chain management** by integrating and

digitizing the supply chain from refinery gate to aircraft wing.

With jet...

...to be that punch-out buy/sell exchange for Jet-A.com is the American **Petroleum Exchange (APE)**, which hosted this week's fuel auction for United Airlines. Based in Rockville...

COMPANY NAMES (DIALOG GENERATED): Aestix ; AirNewco/My Aircraft ; American **Petroleum Exchange** ; Booz Allen & Hamilton ; Jet A ; United Airlines ; US Airways

4/K/68 (Item 4 from file: 624)

DIALOG(R) File 624: McGraw-Hill Publications

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00943631

Users demand, get more interoperability from IT: Trying to integrate plant control systems with sophisticated information technology (IT) has frustrated users and vendors alike. But thanks to greater interoperability, less proprietary hardware, and emerging communications standards, the long-awaited benefits of the IT revolution may be at hand

POWER May/June 1998; Pg 61; Vol. 142, No. 3

Journal Code: POW

ISSN: 0032-5929

Section Heading: INFORMATION TECHNOLOGY: SPECIAL REPORT: OPEN IT

Word Count: 3,513 \*Full text available in Formats 5, 7 and 9\*

BYLINE:

By Robert Swanekamp, PE, Senior Editor

TEXT:

... were sold, according to the Profibus Trade Organization, Scottsdale, Ariz. Profibus has infiltrated the chemical, **petroleum**, and brewing industries.

Users desiring high speed are considering WorldFIP. Major application areas, according to...by all types of enterprise application providers.

Nonetheless, the Oracle Applications package--which includes financial, **supply chain management**, manufacturing, projects, human resources, and sales-force automation modules--has made strong inroads in the...

4/K/69 (Item 5 from file: 624)

DIALOG(R) File 624: McGraw-Hill Publications

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00907266

**SOFTWARE**

Business Week January 12, 1998; Pg 86; Number 3560

Journal Code: BW

ISSN: 0007-7135

Section Heading: Industry Outlook: INFORMATION

Word Count: 1,352 \*Full text available in Formats 5, 7 and 9\*

BYLINE:

By Neil Gross, with Amy Cortese, in New York, and Steve Hamm in San Mateo

TEXT:

... how companies use the Internet to link manufacturers, distributors, and customers. The philosophy is called **supply - chain management**, and the software niche it serves was created by small companies such as i2, Manugistics...

... registers ring in 1998. With name brands such as J.P. Morgan, Home Depot, Philips **Petroleum**, and Simon & ...

...COMPANY NAMES (DIALOG GENERATED): IBM ; J P Morgan ; Logility ; Lotus ; Manugistics ; Microsoft Corp ; Netscape Communications Corp ; Oracle ; PeopleSoft ; Philips **Petroleum** ; Prudential Securities ; PCs ; Red Pepper Software Co ; Simon & Schuster ; Sun Microsystems ; Sybase ; SynQuest ; SAP ; 2

4/K/70 (Item 6 from file: 624)  
DIALOG(R) File 624:McGraw-Hill Publications  
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00841929

**DOE, CHEMICAL INDUSTRY SIGN AGREEMENT TO COLLABORATE ON RESEARCH**

Inside Energy With Federal Lands March 3, 1997; Pg 4; Vol. 75, No. 46

Journal Code: IE ISSN: 0-278-2227

Section Heading: ENERGY

Word Count: 545 \*Full text available in Formats 5, 7 and 9\*

**TEXT:**

...into the 21st Century.

Advances in chemical science and engineering technology as well as in **supply - chain management**, information systems and manufacturing were among the overall topics cited by DOE and five organizations...

... pulp-and-paper, steel, glass, metal-casting and aluminum sectors. The department also expects the **petroleum** -refining industry to begin In addition, DOE has formed a new team to work on...  
?